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Maternal Employment and Childcare in Australia

Submission to the Productivity Commission
Childcare and Early Childhood Learning Inquiry

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Contents

1	Introduction	4
2	Maternal employment international comparisons	5
3	Trends in maternal employment in Australia	10
4	Maternal employment characteristics and non-standard work hours	15
5	Not-employed mothers	19
6	Decision-making, attitudes and preferences	24
7	Childcare and maternal employment	27
8	Unmet demand for childcare	40
9	Final remarks	44
10	References	45
	Appendix: Supplementary tables	46

List of tables

Table 1:	Sources of AIFS information about trends in maternal employment.....	5
Table 2:	Percentage of women employed in selected OECD countries	6
Table 3:	Percentage of employed women working part-time hours, selected OECD countries, 2011	9
Table 4:	Sources of AIFS information about trends in maternal employment.....	10
Table 5:	Selected characteristics of mothers with children aged < 15 years, 2001, 2006 and 2011	12
Table 6:	Maternal employment rates for various characteristics, mothers with children aged < 15 years, 2001, 2006 and 2011.....	13
Table 7:	Maternal employment rates, mothers with children aged < 15 years, by relationship status and age of youngest child, 2001, 2006 and 2011	14
Table 8:	Sources of AIFS information about employed mothers' job characteristics	15
Table 9:	Location and timing of employment among women aged 25–54 years working on a weekday	17
Table 10:	Sources of AIFS information about not-working mothers	19
Table 11:	Labour force status of mothers by relationship status and age of youngest child, 2011	22
Table 12:	Main childcare-related reason for not working, women not in the labour force who were not working for childcare reasons, 2011.....	23
Table 13:	Sources of AIFS information about maternal employment decision-making	24
Table 15:	Sources of AIFS information about childcare and maternal employment	27
Table 16:	Childcare arrangements of children aged 0–2 years, by mothers' employment and hours worked in the previous week, 2011	31
Table 17:	Likelihood of children aged 0–2 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers.....	33
Table 18:	Childcare/ECE arrangements of children aged 3–5 years, by mothers' employment and hours worked in the previous week, 2011	34
Table 19:	Likelihood of children aged 3–5 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers.....	35
Table 20:	Likelihood of children aged 3–5 years being in long day care and/or preschool in the previous week, by selected family characteristics, children with employed mothers.....	36
Table 21:	Childcare arrangements of children aged 6–11 years, by mothers' employment and hours of work in the previous week, 2011	38
Table 22:	Likelihood of children aged 6–11 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers.....	39

Table 23:	Whether some or additional formal ECEC (care or preschool) currently required, by age of child, 2011	40
Table 24:	Main reasons and care arrangements for children who currently require some or additional formal ECEC (care or preschool), by age of child, 2011	41
Table 25:	Types of care sought for children who currently require some or additional formal care, by age of child, 2011.....	42
Table 26:	Whether some or additional formal ECEC (care or preschool) required, by age of child and mothers' employment in previous week, 2011	42
Table 27:	Likelihood of children aged up to 11 years having unmet demand for childcare, by selected family characteristics, by age of child.....	43
Table A1:	Occupation of employed women, percentage working weekend and variable hours, 2008	46
Table A2:	Industry groups of employed women, percentage working weekend and variable hours, 2008	48
Table A3:	Standard and non-standard work hours by occupation and industry group of women aged 25–54 years working on the weekday diary day, 2006.....	49

List of figures

Figure 1:	Female employment participation, selected OECD countries, by age, 2011.....	7
Figure 2:	Employment of mothers with children aged less than 3 years, selected OECD countries, 2008	8
Figure 3:	Percentage of employed women working part-time hours (< 35 hours per week), by age, selected OECD countries, 2011	9
Figure 4:	Couple and single mothers' employment rates, by age of youngest child, 1991–2011.....	11
Figure 5:	Timing of working women's employment, by weekday, women aged 25–54 years	16
Figure 6:	Labour force status of mothers, by relationship status and age of youngest child (years), 2005 to 2011	21
Figure 7:	Main childcare-related reasons for not working, women who want to work and who gave childcare reasons for not working, 2005 to 2011.....	23
Figure 8:	Mothers' and fathers' agreement that it is better if the man earns the money and the woman takes care of the home and children, by mothers' employment status, 2011	25
Figure 9:	Mothers' and fathers' agreement that mothers who don't need the money should not work, by mothers' employment status, 2011.....	26
Figure 10:	Percentage of children in any childcare, by mothers' employment status, 1984–2011	28
Figure 11:	Participation in formal, informal and parent-only care for children with employed mothers, 1984–2011	29

1 Introduction

This submission presents a synthesis of existing research by the Australian Institute of Family Studies (AIFS), along with some new analyses, on topics that are relevant to the Productivity Commission Childcare and Early Childhood Learning Inquiry.

We have focused on providing information that is relevant to the Inquiry's objectives regarding the provision of childcare and early childhood learning that:

- “supports workforce participation, particular for women”; and
- “is more flexible to suit the needs of families, including families with non-standard work hours, disadvantaged children, and regional families”.

As such, this submission provides information about maternal employment in Australia and associations between employment and patterns of childcare use. While we have not directly answered the questions posed in the Commission's issues paper, much of the data provided informs the underlying issues.

The submission is divided into the following sections:

- maternal employment international comparisons;
- trends in maternal employment in Australia;
- maternal employment characteristics and non-standard work hours;
- not-employed mothers;
- decision-making, attitudes and preferences;
- childcare and maternal employment; and
- unmet demand for childcare.

We have not covered children's outcomes in this submission, as AIFS has not undertaken a significant amount of research on the links between early childhood education and care (ECEC) and children's outcomes. Some examples of research that are relevant to this topic and contributed to or published by AIFS are: Huerta et al. (2011), Sims (2011) and Wise (2012).

2 Maternal employment international comparisons

Given that the Inquiry is to examine international models of childcare and early childhood learning, it is relevant to consider how maternal employment in Australia compares to that of other countries. This subsection of the submission draws upon and extends AIFS research that has explored international comparisons of maternal employment (see Table 1).

Table 1: Sources of AIFS information about trends in maternal employment

Source	Relevance to this submission
Baxter, J. A. (2013). <i>Employment characteristics and transitions of mothers in the Longitudinal Study of Australian Children</i> (Occasional Paper No. 50). Canberra: Department of Social Services. (Baxter, 2013d)	Includes some of the OECD data presented in this subsection
Baxter, J. A. (2013, 27 November). <i>Parents working out work: An examination of families interactions with paid employment in Australia today</i> . Paper presented at the AIFS Seminar series, Melbourne. (Baxter, 2013f)	Includes additional OECD figures
Huerta, M., Adema, W., Baxter, J., Corak, M., Deding, M., Gray, M. C. et al. (2011). <i>Early maternal employment and child development in five OECD countries</i> (OECD Social, Employment and Migration Working Papers No. 118). Paris: OECD. (Huerta et al., 2011)	Comparisons of early maternal employment (and childcare use), Australia, US, UK, Canada and Denmark
Baxter, J. A., & Renda, J. (2011). <i>Lone and couple mothers in the Australian labour market: Exploring differences in employment transitions</i> (AIFS Research Paper No. 48). Melbourne: Australian Institute of Family Studies. (Baxter & Renda, 2011b)	Includes some international comparisons of maternal employment for lone and couple mothers

Table 2 shows that in 2011 the employment rate of *all* women in Australia (68%) was above the OECD average (59%), although it was not very much higher than the average (in 2009) when restricted to those aged 25 to 54 years (72% for Australia and 71% for the OECD average). The relatively high employment rate for all women seems to be related to Australian women's higher employment rate in the younger age groups (see Figure 1). From typical childbearing/childrearing ages onward, Australian female employment rates are close to or lower than the OECD average.

For mothers of children under 15 years, in 2009, the employment rate in Australia (62%) was a little lower than the OECD average maternal employment rate (66%) (Table 2). This table also shows that Australia's lower employment rates are apparent for mothers of children aged under 3 years, and aged 3 to 5 years. While not shown here, Australia's employment rate for mothers with children aged 6 to 14 years (74%) is slightly above the OECD average of 73%.¹

¹ Sourced from OECD Family database (downloaded October 2012, LMF1.2 Maternal employment), as at 2009.

Table 2: Percentage of women employed in selected OECD countries

	All women aged 15+ years, 2011 (1)	All women aged 25–54 years, 2009 (a)(2)	Mothers, with child < 15 years, 2009 (b)(2)	Mothers with youngest child < 3 years, 2009 (c)(2)	Mothers with youngest child 3–5 years, 2009 (c)(2)	Single mothers, ^(d) 2007 (3)
Australia	68.2	72.1	61.9	47.4	61.6	60.0
Austria	67.5	79.5	75.4	60.5	62.4	78.3
Belgium	57.0	73.8	70.9	63.8	63.3	59.2
Canada	70.6	74.3	70.5	58.7	68.1	–
Denmark	71.5	82.9	84.0	71.4	77.8	82.0
Finland	68.4	80.4	77.2	52.1	80.7	70.2
France	60.1	76.6	73.6	53.7	63.8	69.9
Germany	68.7	75.4	70.8	36.1	54.8	64.6
Greece	45.8	62.2	58.8	49.5	53.6	76.0
Hungary	51.0	66.9	54.4	13.9	49.9	61.6
Iceland	79.9	85.7	84.8	83.6	–	81.0
Ireland	56.9	67.1	58.7	56.3	–	52.0
Italy	47.0	59.1	55.2	47.3	50.6	76.4
Japan	65.7	65.7	52.5	28.5	47.5	85.4
Luxembourg	57.4	71.4	68.4	58.3	58.7	80.2
Netherlands	70.7	79.3	78.5	69.4	68.3	63.8
New Zealand	69.9	74.2	62.2	46.6	–	54.4
Norway	75.2	–	–	–	–	69.0
Portugal	63.2	74.9	75.4	69.1	71.8	78.1
Spain	53.2	63.8	60.0	45.1	47.9	78.0
Sweden	73.2	81.9	80.3	71.9	81.3	81.1
Switzerland	75.0	77.6	69.7	58.3	61.7	67.0
United Kingdom	67.1	74.4	67.1	52.6	58.3	51.8
United States	64.9	72.0	66.7	54.2	62.8	72.8
OECD average	58.8	70.9	66.2	51.4	64.3	67.0

Notes:

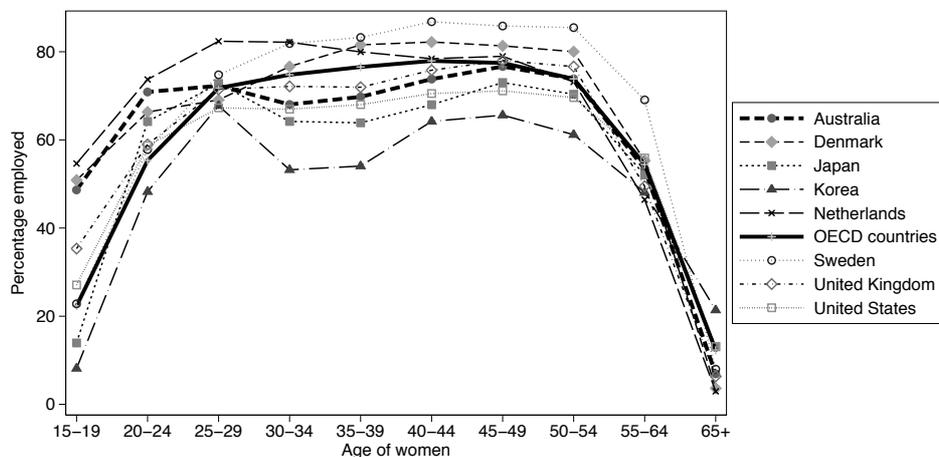
- (a) Data are for 2009 except for Denmark (1999), Switzerland (2006), Japan and the United States (2005), Iceland (2002) and Canada (2001).
- (b) Children under 16 for Canada, Denmark, Iceland, Japan, Switzerland and the United States; children (dependant) under 25 for Finland and Sweden.
- (c) Data are for 2009 except for Australia (2008), Sweden (2007), Switzerland (2006), Japan and the United States (2005), Iceland (2002), Canada (2001) and Denmark (1999). In the OECD database the Australian data were reported for mothers with a child aged less than 5 years (48.3%). The data shown here were calculated from the 2008 Australian Bureau of Statistics (ABS) Childcare and Education Survey unit record file. Note that the percentage employed includes those on maternity or parental leave, which varies considerably across countries (refer to OECD Family database, LMF1.2 Maternal employment).
- (d) Data are for single mothers, except for Denmark, New Zealand, Norway, Sweden and Switzerland, which show data for single parents. Data are for 2007, except for Canada, Japan, Denmark, Switzerland and Sweden (2005), and Australia and New Zealand (2006).

Sources:

- (1) OECD Employment database (downloaded October 2012, LFS by sex and age—indicators—employment participation)
- (2) OECD Family database (downloaded October 2012, LMF1.2 Maternal employment); Australian estimates by age of youngest child are from ABS 2008 Childcare and Education Survey
- (3) OECD Family database (downloaded October 2012, LMF1.3 Maternal employment by family status)

An important consideration when comparing maternal employment rates across countries is that women who are on paid leave from employment are counted as employed, and so for mothers of the youngest children, employment rates are higher in countries that have more generous paid leave conditions. Figure 2 shows for selected OECD countries, the percentage employed,

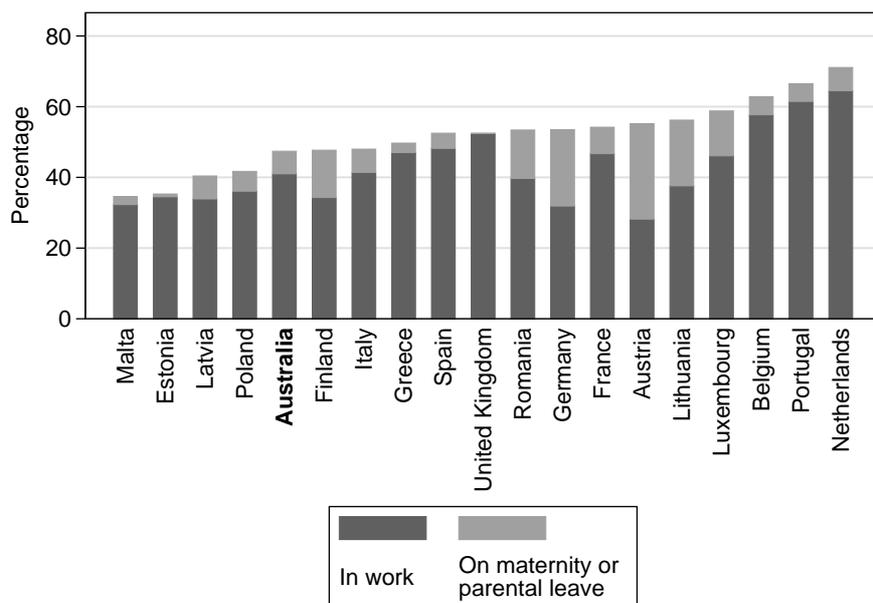
differentiating into those on leave and those at work, for mothers with a youngest child aged under 3 years. As with the overall maternal employment rates, these data show that the percentage employed in 2008 in Australia is somewhat lower than several OECD countries, and so is the percentage in work.²



Source: OECD Employment database: LFS by sex and age—indicators

Figure 1: Female employment participation, selected OECD countries, by age, 2011

² The Australian estimates in this figure have been derived from ABS data, as Australian estimates were not available in the OECD database.



Note: The Australian figure is an estimate derived from the ABS 2008 Childcare and Education Survey. Total employed is differentiated into "in-work" and "on maternity or parental leave" based on actual hours worked previous week. Those who worked no hours or fewer than one hour are counted as "on maternity or parental leave". This is therefore an over-estimate since it includes those on forms of leave other than maternity leave. For notes about and sources for other countries, refer to OECD Family database, LMF1.2 Maternal employment.

Source: OECD Family database (downloaded October 2012, LMF1.2 Maternal employment); Australian estimates are from ABS 2008 Childcare and Education Survey.

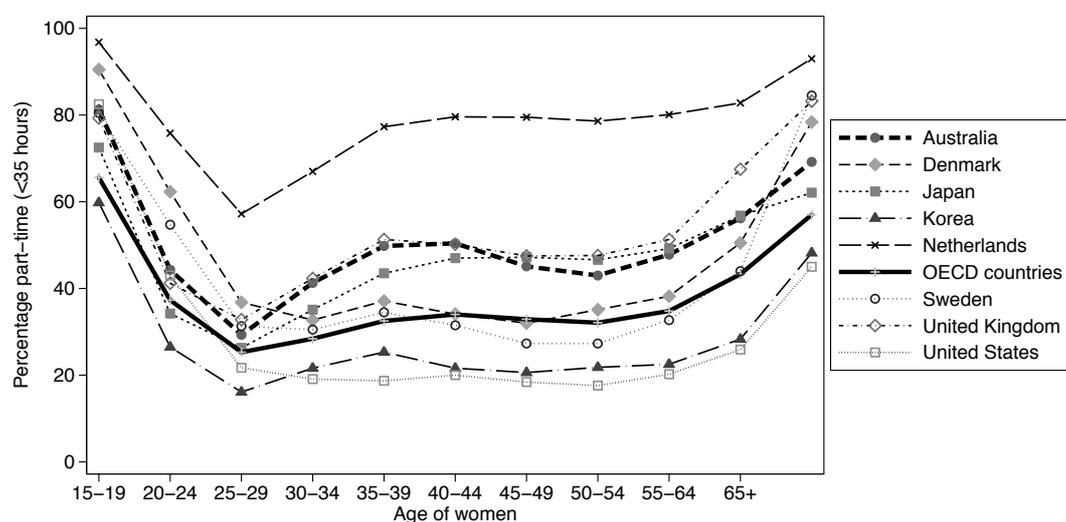
Figure 2: Employment of mothers with children aged less than 3 years, selected OECD countries, 2008

A particular feature of maternal employment in Australia is the relatively high use of part-time work, which mothers often express as a preference to facilitate combining work and family. This is relevant in considering the demand for childcare in Australia, although decisions about working part-time hours may be to some extent related to perceptions about availability and affordability of childcare. Table 3 shows the percentage of employed women who were working part-time across selected OECD countries in 2011. For Australia, 38.5% of employed women worked part-time, compared to an OECD average of 26.0%. Figure 3 shows the use of part-time work over the life course (by age) for Australia, the OECD average and selected OECD countries. Australia's part-time rate for women is higher than the OECD average across all ages, and especially so during the main childbearing/rearing years.

Table 3: Percentage of employed women working part-time hours, selected OECD countries, 2011

	All employed women, part-time employment rate, 2011 (%)
Australia	38.5
Austria	32.8
Belgium	32.4
Canada	27.2
Denmark	25.2
Finland	16.0
France	22.1
Germany	38.0
Greece	14.0
Hungary	6.4
Italy	31.3
Luxembourg	30.2
Netherlands	60.5
New Zealand	34.3
Norway	30.0
Portugal	14.4
Spain	21.9
Sweden	18.4
Switzerland	45.5
United Kingdom	39.3
OECD average	26.0

Source: OECD Employment database (downloaded October 2012, Incidence of full-time part-time employment, common definition)



Source: OECD Employment database: Incidence of employment by usual weekly hours worked (downloaded October 2012).

Figure 3: Percentage of employed women working part-time hours (< 35 hours per week), by age, selected OECD countries, 2011

3 Trends in maternal employment in Australia

This section builds on and extends AIFS primary research on trends in maternal employment. This information is provided as contextual information for the Inquiry, to help understand the changing patterns of employment for mothers with different characteristics.

For recent analyses of trends in maternal employment, refer to the publications outlined in Table 4. Other AIFS publications that include information on this topic are: Baxter (2013c); Baxter and Renda (2011a); Gray, Qu, Renda, and de Vaus (2006); and Hayes, Qu, Weston, and Baxter (2011).

Table 4: Sources of AIFS information about trends in maternal employment

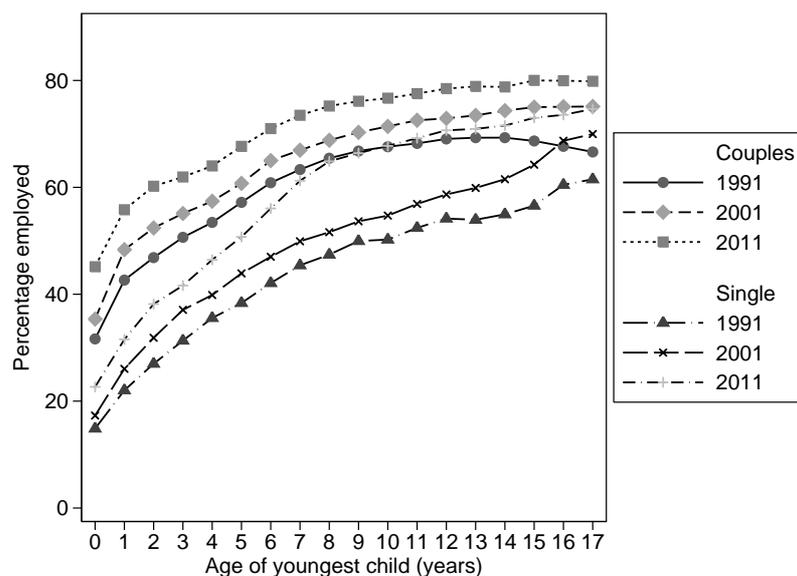
Source	Relevance
Baxter, J. A. (2013). <i>Australian mothers' participation in employment: Analyses of social, demographic and family characteristics using the Household, Income and Labour Dynamics in Australia (HILDA) survey</i> (AIFS Research Paper No. 52). Melbourne: Australian Institute of Family Studies. (Baxter, 2013a)	Includes some analyses of trends in maternal employment using HILDA, with findings compared to those of the ABS labour force survey
Baxter, J. A. (2013). <i>Parents working out work</i> (Australian Family Trends No. 1). Melbourne: Australian Institute of Family Studies. (Baxter, 2013e)	Includes analyses of trends in maternal (and paternal) employment by age of youngest child, using Australian Census data
Baxter, J. A. (2013, 27 November). <i>Parents working out work: An examination of families' interactions with paid employment in Australia today</i> . Paper presented at the AIFS Seminar series, Melbourne. (Baxter, 2013f)	Some slides in this presentation include extensions of the analyses presented in the above publication

One of the very significant changes that has occurred within Australian families over recent decades has been the considerable growth in maternal employment. This sustained growth is apparent across the last 30 years of Census data, which are collected every five years. Among families with children aged under 18 years old, the proportion of mothers who were employed increased from 55% in 1991, to 56% in 1996, 59% in 2001, 63% in 2006 and 65% in 2011.

Growth in maternal employment has been evident for single and couple mothers with children of different ages, although the rates of growth differed for these groups. Between 1991 and 2011, the employment rate of couple mothers increased by just over 10 percentage points to 68%. For single mothers there was an increase of 13 percentage points between 1991 and 2011, with an employment rate of 57% in 2011. That is, single mothers' employment participation grew at a faster rate than couple mothers' over this time, although the rate in 2011 is still slightly lower for single mothers. Of particular note is that between 2001 and 2011, a very large increase in employment participation was apparent for single mothers of children aged 6 years and over (Figure 4).

Similar trends in maternal employment participation are evident according to ABS labour force data and data from the Household, Income and Labour Dynamics in Australia (HILDA) survey³ (see sources listed in Table 4).

³ The HILDA project was initiated and is funded by the Australian Government Department of Social Services (DSS) (formerly the Department of Families, Housing, Community Services and Indigenous Affairs), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.



Source: Australian Population Census, ABS, various years (custom data reports)

Figure 4: Couple and single mothers' employment rates, by age of youngest child, 1991–2011

Baxter (2013e) showed that much of the increase in maternal employment has been in part-time work. According to ABS Census data, 28% of mothers were in part-time work and 23% were in full-time work in 1991. The percentage in part-time work increased to 31% in 1996, 32% in 2001, 35% in 2006 and 36% in 2011. The percentage in full-time work grew more slowly, from 23% of mothers in 1991 to 25% in 2011. Generally, the percentage of mothers working full-time increased with the age of the youngest child.

Among mothers with a child aged under one year, a significant percentage of those counted as “employed” were actually not at work. According to the 2011 Census, 6% of mothers with a child under one year old were employed (and at work) full-time, 16% were employed part-time and another 19% were away from work, though counted as employed. See Baxter (2013e) for earlier Census years. For mothers of children aged under one year old the increased percentage in employment was entirely due to the increased percentage employed but away from work.

Mothers' employment participation varies with different socio-demographic characteristics (Baxter, 2013d; Gray et al., 2006), and can vary with different policy settings (see, for example, Thévenon, 2013). Explaining trends in maternal employment therefore requires analyses of the underlying characteristics of mothers as well as analyses of changes in relevant policies. We present below some initial analyses of how the characteristics of mothers (with children aged under 15 years) have changed over recent intercensal periods—the periods between 2001, 2006 and 2011. These analyses include age of mothers, educational attainment, English language proficiency, relationship status, number of children aged under 15 years in the family and age of youngest child (Table 5).

Over the Census years under study, mothers' levels of educational attainment increased significantly, while other changes explored here were quite slight. The improvements in educational attainment are reflected especially in the percentage of mothers having only incomplete secondary education, which fell from 43% of mothers in 2001, to 33% in 2006 and 19% in 2011. The percentage with bachelor degrees or higher increased from 17% in 2001, to

22% in 2006 and 30% in 2011. These changes of course reflect improvements in educational attainment of women more generally over this time.

Table 5: Selected characteristics of mothers with children aged < 15 years, 2001, 2006 and 2011

Mothers' characteristics	2001 (%)	2006 (%)	2011 (%)
Educational attainment			
Incomplete secondary only	43.2	33.0	19.3
Year 12/certificate/diploma	40.0	45.0	50.4
Bachelor or higher	16.9	22.0	30.3
Relationship status			
Couple	80.8	80.7	81.1
Single	19.2	19.3	18.9
English language proficiency			
Poor proficiency	3.3	3.1	3.2
Only English/good proficiency	96.7	96.9	96.8
Mother's age			
< 25 years	4.7	4.4	5.5
25–29 years	13.1	10.5	9.1
30–34 years	23.1	20.2	19.1
35–39 years	26.3	26.4	25.1
40–44 years	20.8	22.8	23.1
45–49 years	8.7	11.6	12.8
50+ years	3.2	4.1	5.3
Number of children under 15 years			
1 child	41.8	43.2	42.7
2 children	39.5	39.1	39.4
> 2 children	18.7	17.7	18.0
Age of youngest child			
0–2 years	30.4	29.6	31.8
3–5 years	20.8	20.0	20.6
6–14 years	48.9	50.4	47.6

Source: Census confidentialised unit record data

Table 6 shows that mothers' employment rates were higher with increasing levels of educational attainment in each of the Census years, but the gap between the employment rates of those with the lowest and highest educational attainment declined. This is due to the increased employment rates of mothers with incomplete secondary education, but no apparent increase in the employment rates of mothers with a bachelor degree or higher. Employment rates of those with a Year 12 or certificate/diploma education increased too, but not as markedly as those with incomplete secondary education. The higher employment rates of mothers over this period are therefore related to both the increased levels of educational attainment of mothers and the increased employment rates of those with lower levels of education.

Age is relevant in considering mothers' employment, as women who delay their first birth are likely to be more invested in education and/or employment, which may translate into a wish or need to remain attached to employment after commencing childbearing (Baxter, 2013c). Table 6 shows that employment rates of mothers have increased with age, up to the highest age group

(which includes women who have commenced retirement). There were markedly lower employment rates for mothers aged under 25 years. The Census data show that the age distribution of mothers in 2011 was just slightly older than in 2001, but do not seem to be different enough to explain the growth in maternal employment that was evident over this period of time. Perhaps this is more relevant when considering changes over a longer period, rather than a period of just 10 years.

Table 6: Maternal employment rates for various characteristics, mothers with children aged < 15 years, 2001, 2006 and 2011

	2001 (%)	2006 (%)	2011 (%)
Educational attainment			
Incomplete secondary only	46.7	50.8	54.6
Year 12/certificate/diploma	59.0	63.1	63.7
Bachelor or higher	74.6	74.1	75.5
Relationship status			
Couple	59.2	63.5	66.0
Single	43.1	51.3	53.0
English language proficiency			
Poor proficiency	20.4	22.0	23.8
Only English/good proficiency	57.4	62.4	64.9
Mother's age			
< 25 years	27.1	28.4	31.2
25–29 years	42.9	45.4	48.7
30–34 years	51.1	55.8	59.3
35–39 years	61.0	64.7	66.1
40–44 years	67.0	70.1	71.9
45–49 years	67.4	71.6	74.2
50+ years	46.2	60.3	63.7
Number of children under 15 years			
1 child	59.2	65.4	67.5
2 children	58.9	63.2	65.3
> 2 children	44.2	46.2	50.3
Total	56.1	61.1	63.6

Source: Census confidentialised unit record data

Two key family characteristics that are expected to be associated with different levels of employment participation are: (a) number of children; and (b) age of youngest child. There do not appear to have been shifts in the distribution of these characteristics, but they are both related to different rates of employment participation. Table 6 shows that women with fewer children under 15 years were more likely to be employed in each of the Census years.

Table 7 indicates that employment was more likely when the youngest child was older, again, with increases in each of the age groups over the Census years for couple mothers (with children of all ages) and single mothers with youngest children over the age of 2 years (there were only small variations over the decade for single mothers with children aged 0 to 2 years)

For single mothers, the greatest increases occurred among those with children aged 3 to 5 years and 6 to 14 years. These changing employment patterns may in part be due to welfare reform,

which has meant that mothers can no longer remain on income support until children are aged 16 years without being required to look for work.

Table 7: Maternal employment rates, mothers with children aged < 15 years, by relationship status and age of youngest child, 2001, 2006 and 2011

Relationship status and age of youngest child	2001 (%)	2006 (%)	2011 (%)
Couple mothers			
0–2 years	45.2	48.9	54.0
3–5 years	57.5	60.8	65.2
6–14 years	70.9	74.6	75.3
All < 15 years	59.8	63.5	65.8
Single mothers			
0–2 years	24.3	23.3	25.7
3–5 years	37.2	46.2	47.8
6–14 years	54.2	62.5	64.2
All < 15 years	44.1	51.3	52.3
All mothers			
0–2 years	42.3	45.7	50.5
3–5 years	53.4	57.9	62.0
6–14 years	67.2	71.9	72.7
All < 15 years	56.1	61.1	63.6

Source: Census confidentialised unit record data

Overall, rising levels of educational attainment appear to be an important factor in explaining increases in maternal employment. To what extent current trends in maternal employment might continue will depend upon how the educational attainment of mothers changes into the future, and also will depend upon how other characteristics of mothers and families change.

4 Maternal employment characteristics and non-standard work hours

In relation to childcare needs in families of working mothers, it is important to recognise the characteristics of mothers' jobs. The characteristics of employment are likely to matter in thinking about the need for childcare in families with employed mothers. (This is discussed further in the section on childcare and maternal employment.)

This section summarises some AIFS research in this area, though for detailed information about job characteristics, the original publications should be examined (Table 8). Adding to existing work on work hours, job contract, occupations and job quality, this section also presents some new analyses on women's employment at non-standard hours, and women's employment in jobs with variable hours. This is expected to be of interest to this Inquiry, given that one of the objectives of the Inquiry is to explore ways in which the childcare system should be made more flexible to meet the needs of families in which parents have these sorts of working arrangements.

Table 8: Sources of AIFS information about employed mothers' job characteristics

Source	Relevance
Baxter, J. A. (2013). <i>Employment characteristics and transitions of mothers in the Longitudinal Study of Australian Children</i> (Occasional Paper No. 50). Canberra: Department of Social Services. (Baxter, 2013d)	Presents analyses of working hours, job contracts and occupations of mothers
Baxter, J. A., & Gray, M. (2006). The paid work characteristics of mothers with infants. <i>Family Matters</i> , 77, 34–41. (Baxter & Gray, 2006)	Presents descriptive analyses of the types of jobs that mothers work in when they have very young children (aged 3–14 months)
Baxter, J. A., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). <i>Mothers and fathers with young children: Paid employment, caring and wellbeing</i> (Social Policy Research Paper No. 30). Canberra: Department of Families, Community Services and Indigenous Affairs. (Baxter et al., 2007)	Includes analyses of the labour force status and job characteristics of parents with young children

From these analyses, some of the things we know about mother's employment are:

- Many mothers work part-time hours, including those working very short hours. Working hours increase, on average, as the youngest child grows older.
- Employed mothers include those in self-employment, and permanent and casual employment. Self-employment is most common among mothers of infants. As children grow older, a greater proportion of mothers are in permanent work, although self-employment and casual work are still common.
- Job quality (and work–family spillover) varies across jobs with different characteristics. Some mothers have markedly less flexibility and control over their working time than others.

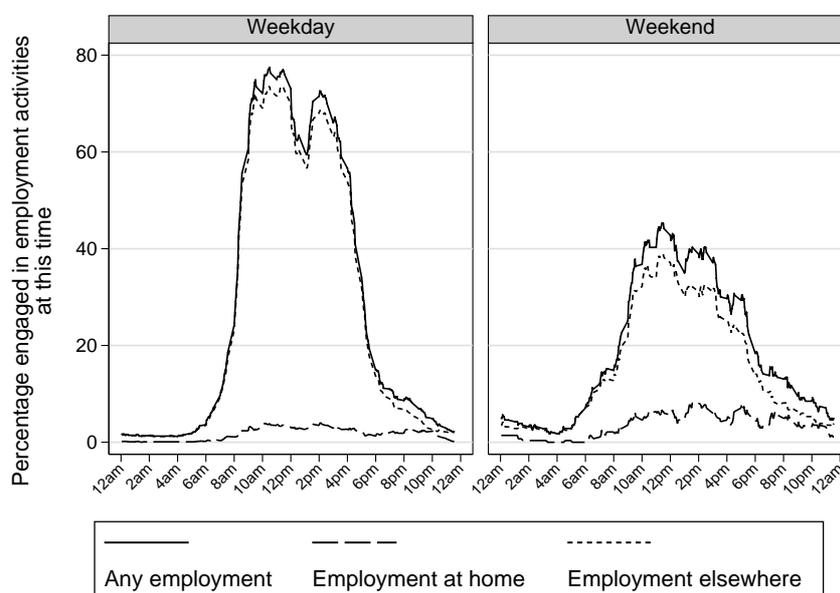
In the context of childcare, an important question is: To what extent do mothers work outside of standard working hours, when formal childcare services are typically provided?

Working on weekends may be problematic since most formal childcare is available on weekdays. According to the 2008 ABS Forms of Employment Survey, among all employed women, 32% sometimes worked on weekends (2% weekends only and 30% weekdays and weekends).⁴ The percentage is a little lower if we focus only on mothers with children aged under 15 years, with 26% sometimes working weekends.

⁴ We have derived additional statistics from the 2008 survey, as we have access to these unit record data. The overall estimates of weekend work were the same in the 2012 ABS Forms of Employment survey.

Among employed women, not surprisingly, working weekends is most likely for those working in sales jobs (57%). It is also relatively common for those employed as technicians and trades workers (49%) and community and personal service workers (45%). By industry of employment, working weekends is common among those working in accommodation and food services (69%), retail trade (55%) and arts and recreation services (59%). Table A1 shows these data for employed women, for all occupations, and Table A2 shows these data for all industries.⁵

Of course, some of this weekend work may be done at home. Figure 5 uses the 2006 ABS Time Use Survey,⁶ and shows the percentage of women who were working at any time over the day, for weekends and weekdays, for those who reported that they worked at some time on that day. The percentage reported to be undertaking employment at any time is shown, and this percentage is also shown for those undertaking employment at home and undertaking employment elsewhere. Most of the weekend employment was reported to occur away from home.



Note: Does not include work-related commuting. The weekday figure includes those who reported some employment on that weekday, and the weekend figure includes those who reported some employment on that weekend day.

Source: ABS 2006 Time Use Survey

Figure 5: Timing of working women's employment, by weekday, women aged 25–54 years

As well as weekend work, having employment that involves work outside standard day-time hours could be problematic for childcare in some families. According to the 2012 ABS Working

⁵ The 2008 Forms of Employment Survey classifies occupations according to Australian and New Zealand Standard Classification of Occupations (ANZSCO). Industries are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006.

⁶ The main component of the Time Use Survey was the time use diary that was completed by 83% of respondents in 2006. The diary covered two consecutive 24-hour periods, for which respondents identified their activities, providing detail down to 5-minute intervals. Across the duration of these two days, respondents recorded their main activities, and for each of those activities, also recorded supplementary information on such things as what else they are doing at the same time (secondary activities), who they were with and where they were.

Time Arrangements survey, 6% of female employees usually worked the *majority* of their working hours between 7 pm and 7 am in their main job. In the 2006 Working Time Arrangements survey, the information provided was slightly different, reporting on the percentage who usually worked *any* hours between 7 pm and 7 am, and this figure was 25% for female employees who held a single job.

To explore this in more detail we use the 2006 ABS Time Use Survey. Looking at weekdays on which women reported doing some employment, Table 9 shows the percentage in employment at some time during standard hours (between 7 am and 7 pm) and non-standard hours (between midnight and 7 am, or between 7 pm and midnight), and also according to the location of the work (at home or away from home). As work across one day can span multiple locations and times, women could report working in one or more of these time slots, and one or both of the locations.

Table 9: Location and timing of employment among women aged 25–54 years working on a weekday

	Standard hours	Non-standard hours		
	7 am to before 7 pm	Midnight to 7 am	7 pm to midnight	Either (7 pm to 7 am)
Total	99%	9%	19%	26%
Home	15%	1%	8%	9%
Elsewhere	91%	8%	11%	17%

Note: Does not include work-related commuting.

Source: ABS 2006 Time Use Survey confidentialised unit record file

Overall, for women aged 25–54 years, 26% of weekday work involved some work during non-standard hours, with 9% of weekdays including work between midnight and 7 am and 19% between 7 pm and midnight. Most of those working in the morning did so away from home, while evening work was quite often done at home.

Figure 5 shows that very small percentages of women were engaged in employment at any time within these non-standard hours.

With respect to who does this non-standard work, the percentage of mothers working non-standard hours (23%) was just less than the percentage for all women aged 25 to 54 years. Partnered mothers were a little more likely than single mothers to work non-standard hours (24% compared to 21%). Mothers with children aged under 5 years were more likely to work non-standard hours (31%) compared to those with children aged 5 to 11 years (19%).

Among women aged 25 to 54 years who worked on weekdays, differences by occupation revealed that non-standard work was more likely for those employed as machinery operators or labourers (52% worked some non-standard hours on weekdays), and community and personal service workers (35%). It was least likely for clerical and administrative service workers (14%).⁷ See Table A3 for these data, and also data by broad industry groups.

Another factor that is relevant to employed mothers and access to childcare is the extent to which their working hours change at short notice. When this occurs it can be difficult for families to plan their childcare needs.

⁷ The 2006 Time Use Survey classifies occupations according to ANZSCO 2005, and industries according to ANZSIC 2006.

Using the 2008 ABS Forms of Employment Survey,⁸ 36% of employed women had hours that varied or were usually on standby or on call. The percentage was 35% for female employees and higher for female employers and own account (self-employed) workers (55%). If calculated just for mothers with children aged under 15 years, the percentages are virtually the same (38% of employed mothers overall, 35% for employees, and 57% for employers and own account workers). Among mothers there were not marked differences according to mothers' relationship status.

Very marked differences were apparent by occupation. For example, among all employed women, relatively high percentages with variable hours (including being on call or standby) were found for those employed as managers (52%), community and personal service workers (45%), labourers (42%) and sales workers (40%), with relatively low percentages for those employed as clerical and administrative workers (25%), machinery operators and drivers (27%). See Table A1 for details.

Similarly, there were marked differences by industry of employment (Table A2). The percentages of women having variable hours (or being on call), for the most common industry groups that women were employed in, were health care and social assistance (39%), retail trade (39%), education and training (27%), and accommodation and food services (53%).

The ABS Working Time Arrangements Survey (2012) found a similar percentage of employed women (33%) had hours that varied or were usually required to be on call or standby. Elaborating on how far ahead of time women knew their advance work schedule, 3% knew their schedule less than one day ahead, 4% had notice of 1 day to less than 1 week, 7% had notice of 1 week to less than 2 weeks, 16% had more notice, and 11% had arrangements that varied. For those who rely upon non-parental childcare, it might be particularly difficult for those with little notice of their hours to manage their care arrangements.

⁸ These figures derived from the 2008 ABS Forms of Employment Survey confidentialised unit record file.

5 Not-employed mothers

This section presents some of the AIFS research that has focused on not-employed mothers, making use of labour force status and reasons for not working to consider whether women are not employed because of some barriers to work. Recent publications exploring these issues are noted in Table 10.

This area is relevant to the Inquiry, in thinking about the extent to which mothers' non-employment may be related to difficulties they have experienced (or perceive that they would experience) with the childcare and/or early learning system. We discuss this more, also, in the following section on decision-making, attitudes and preferences.

Table 10: Sources of AIFS information about not-working mothers

Source	Relevance
Baxter, J. A. (2013). <i>Employment characteristics and transitions of mothers in the Longitudinal Study of Australian Children</i> (Occasional Paper No. 50). Canberra: Department of Social Services. (Baxter, 2013d)	Includes a section that explores not-employed mothers' reasons for not working
Baxter, J. A. (2013). <i>Australian mothers' participation in employment: Analyses of social, demographic and family characteristics using the Household, Income and Labour Dynamics in Australia (HILDA) survey</i> (AIFS Research Paper No. 52). Melbourne: Australian Institute of Family Studies. (Baxter, 2013a)	Provides detailed descriptions of the characteristics and labour force status of not-working mothers Includes analyses of mothers' preferences for work, and reasons for not looking for work
Baxter, J. A. (2013). <i>Parents working out work</i> (Australian Family Trends No. 1). Melbourne: Australian Institute of Family Studies. (Baxter, 2013e)	Includes some analyses of the labour force status of parents (showing percentages unemployed, not in the labour force[NILF], as well as categories of employed).
Baxter, J. A. (2013, 27 November 2013). <i>Parents working out work: An examination of families' interactions with paid employment in Australia today</i> . Paper presented at the AIFS Seminar series, Melbourne. (Baxter, 2013f)	Some slides in this presentation include extensions of the analyses presented in the above publication

Parents who are not in paid employment may have a range of reasons for this. Some may prefer to be in employment, but are out of employment because of difficulties in finding work. This, for example, is reflected in the percentage who are unemployed. Those classified as "unemployed" differ from other not-employed people who are classified as "not in the labour force" (NILF), as being unemployed includes those who would like to be working and are actually seeking work (and according to the stricter definition, are available to start work). The "not in the labour force" category includes those who are out of employment to focus on caring for children or others with an illness or disability, as well as those who are not actually looking for employment.

Analyses of Census data in Baxter (2013e) show that most jobless mothers have been classified as not in the labour force, with the percentage of mothers classified as unemployed declining from 1991 to 2011.

Using the Longitudinal Study of Australian Children (LSAC), Baxter (2013d) showed that as a percentage of not-employed mothers, the unemployed increased among those with older children, indicating that those who remain out of employment as their children grow older include a disproportionate percentage of mothers who are facing some barriers to fulfilling their wish to be employed. This was also apparent when examining the activities of mothers by age of youngest child, with undertaking "home duties" becoming less likely and becoming "unemployed" more likely as children grew older.

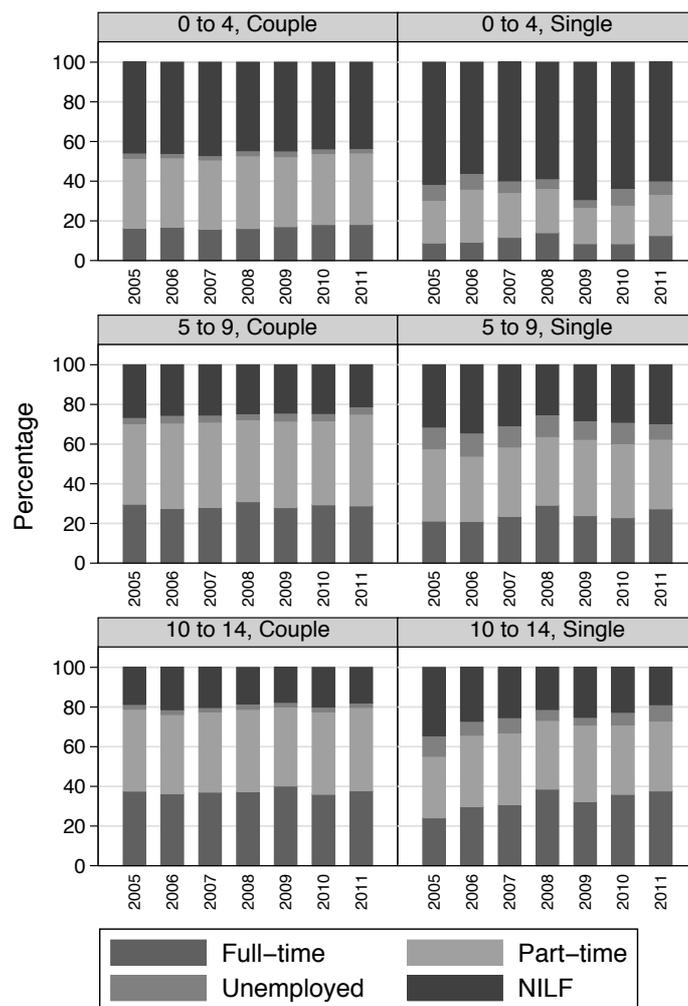
At all ages of children, reasons for being out of employment for not-employed mothers were dominated by their preference to care for their children.

As children grow older, reasons for not being employed increasingly suggest barriers to or difficulties in gaining employment. Mothers more likely to give such reasons were those with poor health, a disability or potential caring responsibilities (having someone in the home with a medical condition or disability); single mothers and mothers with not-employed partners; mothers with larger families; and younger mothers.

These findings were also apparent in analyses of HILDA (Baxter, 2013a).

To further demonstrate this, the ABS Monthly Labour Force Survey findings for 2005 to 2011 are shown in Figure 6, for single and couple mothers, by age of youngest child (grouped). We focus on the findings related to mothers who are not employed.

- For mothers in couple families with a child aged 0 to 4 years, very small percentages were unemployed, with just under half the mothers being not in the labour force. This indicates that they were not actively looking for work or were actively looking but not available to start work. (Most were not actively looking; see below.) There was little change in these percentages across 2005 to 2011.
- The proportions of couple mothers with a youngest child aged 5 to 9 years or 10 to 14 years in each labour force category similarly did not change a great deal over this period. As children grew older, couple mothers were more likely to be employed (full-time or part-time), with the percentage unemployed remaining low.
- Single mothers with a child aged 0 to 4 years are a little more likely to be unemployed than couple mothers with children of similar ages, though even so the percentages unemployed were quite small. There was some variation over 2005–11, but no clear trend. The pattern for single mothers with a youngest child aged 5 to 9 years was similar, though with higher proportions in employment (but lower than couple mothers) and also with higher proportions unemployed.
- For single mothers with a youngest child aged 10 to 14 years, the percentage employed increased from 2005 to 2011, accompanied by a decline in the percentage not in the labour force. The percentage unemployed varied a little over the years.



Source: ABS Monthly Labour Force Survey, 2012 (data for June of each year)

Figure 6: Labour force status of mothers, by relationship status and age of youngest child (years), 2005 to 2011

These data show that, generally, mothers who are not employed are more often counted as “not in the labour force” rather than “unemployed”. That is, mothers who are not in employment are most often not actively seeking work and available to start work. However, single mothers have higher proportions unemployed compared to couple mothers.

This is also evident using the 2011 HILDA survey (Table 11). In this survey, mothers who were not in the labour force were differentiated according to their level of attachment to the labour force. To determine whether mothers wanted to work, they were asked: “Even though you are not looking for work now, would you like a job? (Assume that suitable childcare arrangements could be found.)”. In these data:

- being “NILF, marginally attached” to the labour force means having indicated wanting to work and looking for work or available to start work in the next 4 weeks;⁹

⁹ Those who were actively looking for work were counted as “unemployed” if they were available to start work in the week of the survey; otherwise they were counted as not in the labour force.

- “other NILF, wants a job” comprises mothers who wanted (or maybe wanted) to work (assuming that suitable childcare would be available) but were neither looking for work nor available to start work; and
- those classified as “other NILF, does not want a job” are those who indicated that they did not want to work.

The degrees of attachment to the labour force, not surprisingly, vary with ages of children. Mothers of the youngest children (0 to 2 years) were most likely to say they did not want a job now (31% of couple and single mothers). For these families, couple mothers were more likely to be employed than single mothers, and a significant proportion of the single mothers indicated that they would like a job, and were either looking for work or available to start work in the next 4 weeks (assuming that suitable childcare would be available).

Table 11: Labour force status of mothers by relationship status and age of youngest child, 2011

Relationship status and age of youngest child (years)	Full-time employed	Part-time employed	Un-employed	NILF, marginally attached	Other NILF, wants a job	Other NILF, does not want a job	Total
Couple mother							
0–2 years	15.0	30.8	2.1	13.9	7.5	30.5	100.0
3–5 years	20.9	42.4	3.4	8.5	3.5	21.3	100.0
6–9 years	29.6	43.9	4.1	8.6	2.8	10.9	100.0
10–14 years	35.1	47.5	1.5	4.8	1.5	9.5	100.0
All couple mothers	24.1	39.8	2.6	9.6	4.3	19.6	100.0
Single mother							
0–2 years	7.9	18.1	7.5	23.7	11.7	31.1	100.0
3–5 years	13.5	30.6	12.7	20.2	9.0	13.9	100.0
6–9 years	33.0	34.0	8.4	5.3	5.3	14.0	100.0
10–14 years	38.9	35.2	10.0	4.5	2.9	8.4	100.0
All single mothers	25.5	30.6	9.8	12.1	6.6	15.3	100.0

Source: HILDA 2011

According to the ABS Persons Not in the Labour Force Survey, in 2011 a total of 275,900 women said they wanted to work, but gave childcare-related reasons for not looking for work or for not being available to start work.¹⁰ As is evident in the above analyses, and shown in Table 12, these childcare-related reasons were not only to do with access to formal care options. In fact 60% said their main childcare reason for not working was either that they preferred to look after children, or they thought their children were too young or too old for childcare. Of the reasons related to formal childcare, the cost of care was cited most often as being the reason for not working (either not looking for work, or not being available).

¹⁰ The population includes: “persons not in the labour force because they were caring for children, who wanted to work but were not actively looking for work”; persons not in the labour force who wanted to work and were actively looking for work and were not available to start work, who reported “caring for children” in “All reasons not available to start work within four weeks” (from September 2007) or in “Main reason not available to start work within four weeks” (September 2005 and 2006); and people who said they would like a job if they had suitable childcare arrangements, but did not report childcare as a reason they were not actively looking or not available for work within four weeks.

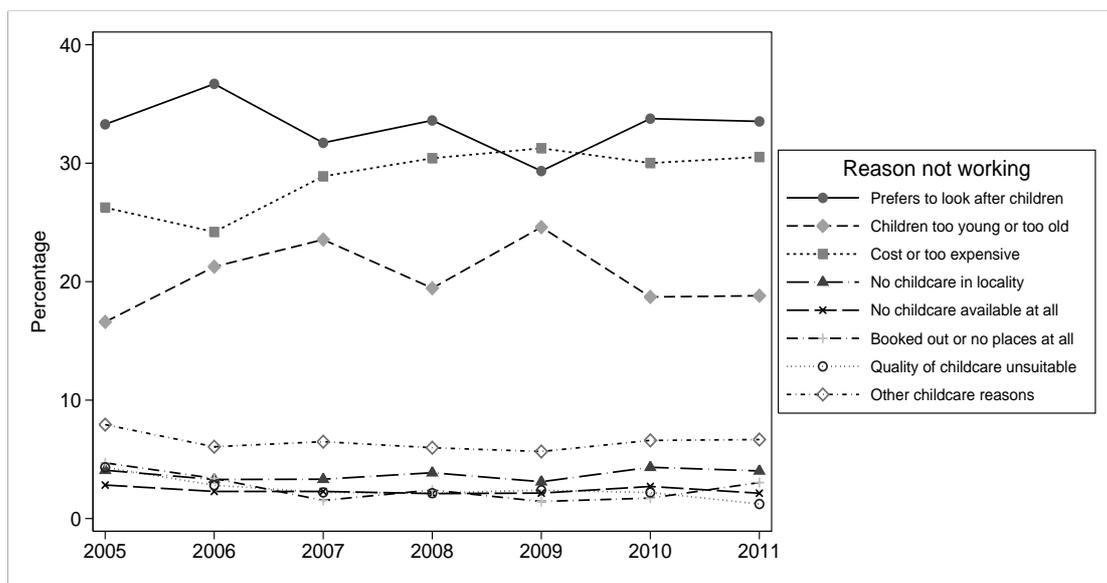
Table 12: Main childcare-related reason for not working, women not in the labour force who were not working for childcare reasons, 2011

Main childcare reason for not working	Estimated number of women	%
Formal childcare problem	113,000	41
Cost or too expensive	84,200	31
No childcare in locality	11,100	4
No childcare available at all	5,900	2
Booked out or no places at all	8,400	3
Quality of childcare unsuitable	3,400	1
Preference	162,800	60
Prefers to look after children	92,500	34
Children too young or too old	51,900	19
Other childcare reasons	18,400	7
Total	275,900	100

Note: The population is described in footnote 9.

Source: ABS Persons not in the labour force, 2011, online tables

Figure 7 shows how childcare reasons have varied across recent years, from 2005 to 2011. The one trend that is evident is the increase in the proportion of women reporting that the cost of childcare is a barrier to their looking for work or being available to start work.



Note: The population is described in footnote 9.

Source: ABS Persons not in the labour force, 2011, online tables.

Figure 7: Main childcare-related reasons for not working, women who want to work and who gave childcare reasons for not working, 2005 to 2011

6 Decision-making, attitudes and preferences

While many families rely on non-parental childcare to enable them to participate in employment, the complexity of decision-making about childcare and employment needs to be recognised, when thinking about how the childcare and early learning system facilitates maternal employment. This section describes AIFS research on related areas of decision-making, attitudes and preferences. AIFS is currently also exploring these issues as part of the evaluation of the Government's Childcare flexibility trials.

Understanding the decision-making process that underlies the employment decisions of mothers (and parents more generally) was a particular focus of the "Families, Work and Decisions Study" that was undertaken by AIFS in 2004. Selected publications that draw upon this study are listed in Table 13.

Table 13: Sources of AIFS information about maternal employment decision-making

Source	Relevance
Hand, K., & Hughes, J. (2004). Mothers' reflections about work and family life. <i>Family Matters</i> , 69, 45–49. (Hand & Hughes, 2004)	Presents analyses of mothers' beliefs about mothering and how best to combine paid work with having and raising children
Hand, K. (2007). Mothers' accounts of work and family decision-making in couple families: An analysis of the Family and Work Decisions Study. <i>Family Matters</i> , 75, 70–76. (Hand, 2007)	Explores mothers' accounts about how parenting and paid work decisions were made in their families Mothers' perceptions about the extent to which their partners contributed to these decisions, and how their beliefs about the role of fathers in the lives of children and families influenced their decisions about these arrangements, are also explored
Hand, K., & Baxter, J. A. (2013). Maternal employment and the care of school-aged children. <i>Australian Journal of Labour Economics</i> , 16(3), 329–349. (Hand & Baxter, 2013)	Combines Family and Work Decisions (FAWD) survey data with LSAC data to explore employment and childcare for school-aged children Includes analysis and discussion of the interweave of decision-making about employment and childcare

Information presented in the previous section on mothers' reasons for being out of employment is based on survey data in which mothers were given a range of options from which to choose. In those surveys, respondents were generally not able to elaborate on the complex ways in which constraints, opportunities and preferences may have led them to their current status in the labour market.

For example, mothers' responses about whether or not they want to work are likely to reflect their preferences regarding caring for children, their expectations about the sharing of care and other household work in their family, their views or perceptions about the availability of options for non-parental care, and also the options that they have (or perceive they have) for jobs they are likely to be able to find and take on. Perceptions about the availability of childcare may also affect women's reporting of whether or not they want to work.

Survey data reveal that men and women, and mothers and fathers more specifically, hold a range of views regarding gender roles and maternal employment. Most parents are accepting of mothers being employed, but there is also a strong preference by many mothers to remain out of employment when their children are young.

For example, according to HILDA,¹¹ most mothers tended *not* to agree with the statement: "It is better for everyone involved if the man earns the money and the woman takes care of the home and children". On a scale of 1 (strongly disagree) to 7 (strongly agree), 13% selected 6 or 7

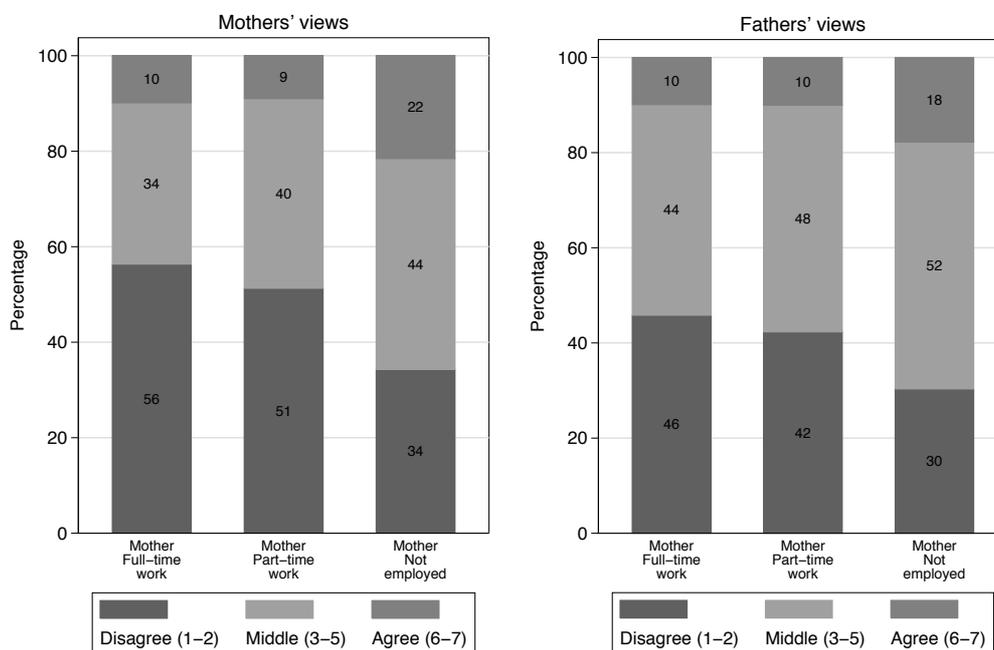
¹¹ Derived from unit record data from Wave 11 of HILDA, collected in 2011.

(agreeing with the statement), and 48% selected 1 or 2 (disagreeing with the statement), with 38% selecting a number in the middle of the range. When fathers were asked about their agreement with this statement, 13% agreed, 39% disagreed and 48% scored in the middle.

On another statement: “Mothers who don’t need the money should not work”, similarly, most mothers disagreed with this (46%) or scored in the middle (42%) rather than agreeing (12%). Fathers’ responses indicated that 37% disagreed, 48% were in the middle and 15% agreed.

Figure 8 shows that couple mothers in the HILDA survey who were employed full-time were more likely than those employed part-time or not employed to disagree with the statement: “It is better for everyone involved if the man earns the money and the woman takes care of the home and children”. Not-employed mothers were more likely than other mothers to agree with this statement. Similar patterns emerged for the statement: “Mothers who don’t need the money should not work” (Figure 9).

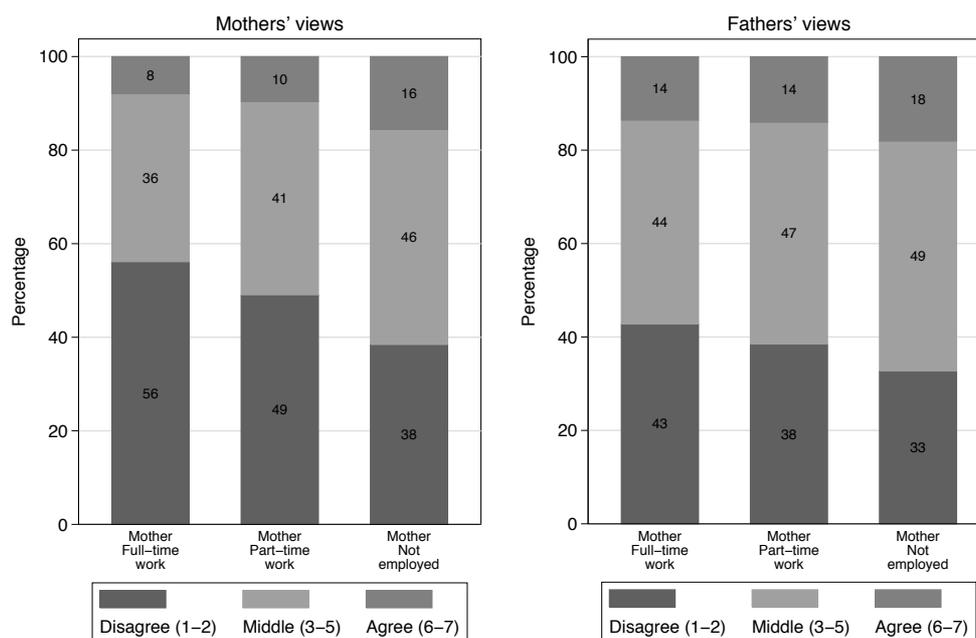
Within couple families, mothers’ employment participation may be related to fathers’ views about maternal employment. Figure 8 shows that fathers were a little less likely than mothers to disagree with the statement: “It is better for everyone involved if the man earns the money and the woman takes care of the home and children”, but were less likely to disagree with the statement when mothers worked longer hours. The highest proportion of fathers agreeing with this statement was within families in which mothers were not employed. As with mothers’ views, the associations between fathers’ views regarding the statement: “Mothers who don’t need the money should not work” and mothers’ work hours reflected less disapproval of maternal employment when mothers worked longer hours (Figure 9).



Note: Parents were asked how much they agreed (on a scale of 1–7) with the statement: “It is better for everyone involved if the man earns the money and the woman takes care of the home and children”. Includes mothers and fathers in couple relationships with children aged under 15 years.

Source: HILDA 2011

Figure 8: Mothers’ and fathers’ agreement that it is better if the man earns the money and the woman takes care of the home and children, by mothers’ employment status, 2011



Note: Parents were asked how much they agreed (on a scale of 1–7) with the statement: “Mothers who don’t need the money should not work”. Includes mothers and fathers in couple relationships with children aged under 15 years.

Source: HILDA 2011

Figure 9: Mothers’ and fathers’ agreement that mothers who don’t need the money should not work, by mothers’ employment status, 2011

It is difficult to analyse data on attitudes and preferences in relation to actual employment behaviour, since those attitudes and preferences are likely to determine, as well as be determined by, past and current (and possibly future plans for) patterns of employment. (However, refer to Baxter, 2013a, for analyses of later employment transitions according to attitudes at a point in time.) Likewise, with respect to fathers’ views, we cannot say from these figures whether fathers’ views about maternal employment had any influence over maternal employment decisions.

Previous AIFS research that explores decision-making about work and family includes:

- Hand and Hughes (2004) for discussion of factors that are important to mothers in making decisions about work and family;
- Baxter (2013f) for some analyses of gender role attitudes of men and women, using HILDA;
- Baxter (2013d) and Baxter (2013a) regarding mothers’ reasons for non-employment; and
- Hand and Baxter (2013) regarding decision-making about employment for mothers of school-aged children.

7 Childcare and maternal employment

Understanding the existing patterns of childcare participation is clearly of relevance in thinking about possible ways in which the childcare (and early childhood learning) system in Australia could change in the future. This includes understanding which children are in different forms of childcare. This section highlights some AIFS research on this topic, in which we have examined how patterns of childcare participation vary according to maternal employment and other family characteristics (Table 15).

In this section, some of the key associations between maternal employment and childcare participation are presented (taking findings from Baxter, 2013b). This is followed by some new analyses of how childcare varies with different characteristics of mothers and families.

Table 15: Sources of AIFS information about childcare and maternal employment

Source	Relevance
Baxter, J. A. (2013). <i>Childcare participation and maternal employment trends in Australia</i> (AIFS Research Report No. 26). Melbourne: Australian Institute of Family Studies. (Baxter, 2013b)	Uses ABS data from the Childhood Education and Care survey (previously named the Child Care Survey), from the 1980s to 2011, to examine types of childcare used by children of different ages, according to mothers' employment status
Baxter, J. A., & Hand, K. (2013). <i>Access to early childhood education in Australia</i> (AIFS Research Report No. 24). Melbourne: Australian Institute of Family Studies. (Baxter & Hand, 2013)	Focuses on children in the year before full-time school (around 4–5 years), providing analyses of different forms of ECE used (in particular, long day care versus preschools) according to child, family and regional characteristics Also includes some analyses of decision-making about types of care used for children of this age
Hand, K., Baxter, J. A., Sweid, R., Bluett-Boyd, N., & Price-Robertson, R. (in press). <i>Access to early childhood education in Australia: Insights from a qualitative study</i> (AIFS Research Report No. 27). Melbourne: Australian Institute of Family Studies. (Hand et al., in press)	Follows from the above research report, using qualitative research to explore parental decision-making about childcare/preschool for children in the year before full-time school
Hand, K., & Baxter, J. A. (2013). Maternal employment and the care of school-aged children. <i>Australian Journal of Labour Economics</i> , 16(3), 329–349. (Hand & Baxter, 2013)	Combines FAWD data with LSAC data to explore childcare for school-aged children
Baxter, J. A. (in press). Care for children in school holidays. In Australian Institute of Family Studies, <i>The Longitudinal Study of Australian Children annual statistical report 2013</i> . Melbourne: AIFS. (Baxter, in press)	Uses LSAC to explore variation in school holiday care for children aged 6 to 11 years, with a focus on variation according to ages of children and parental employment characteristics
Huerta, M., Adema, W., Baxter, J., Corak, M., Deding, M., Gray, M. C. et al. (2011). <i>Early maternal employment and child development in five OECD countries</i> (OECD Social, Employment and Migration Working Papers No. 118). Paris: OECD. (Huerta et al., 2011)	Comparisons of early maternal employment (and childcare use) in Australia, US, UK, Canada and Denmark
Baxter, J. A., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). <i>Mothers and fathers with young children: Paid employment, caring and wellbeing</i> (Social Policy Research Paper No. 30). Canberra: Department of Families, Community Services and Indigenous Affairs. (Baxter et al., 2007)	Includes a section on childcare use, including analyses of determinants of different forms of childcare for children aged 0–1 year and aged 4–5 years
Hand, K. (2005). Mothers' views on using formal childcare. <i>Family Matters</i> , 70, 10–17. (Hand, 2005)	Uses in-depth interview data from FAWD, to explore mothers' reasons for using or not using childcare, and their views on the childcare available to them

Baxter (2013b) used ABS data to examine trends in different forms of childcare according to mothers' employment status. Figure 10 summarises data from this publication, showing, for 1984, 1993, 2005 and 2011, the percentage of children in any childcare (informal or formal, including preschool but not school) according to whether mothers were employed.

In any year, and for each child age group, children were more likely to be in childcare when mothers were employed.

Even in families with not-employed mothers, a high proportion of children aged around 3 to 5 years were in some childcare. These ages coincide with the approximate ages of early childhood education, and higher rates of attendance at these ages reflects that as children grow out of infancy, parents increasingly believe the experience of childcare is good for children’s development (McDonald, 2001).

For children of all ages, some not-employed mothers may only be temporarily out of the workforce, and they may wish to retain their child’s place in childcare, for the good of the child, to alleviate their caring responsibilities at home, or to ensure their childcare place is not lost for the future.

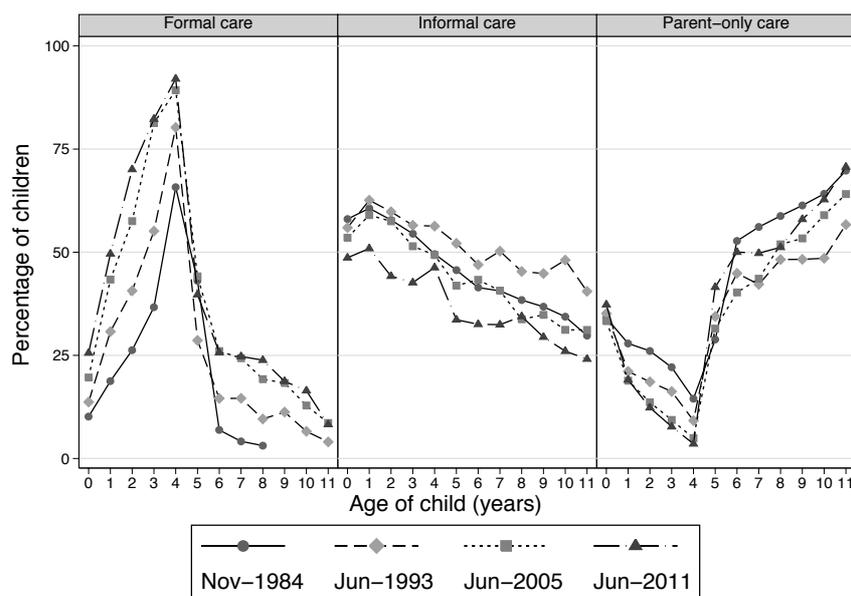


Note: Childcare includes formal and informal care. Formal care includes preschool, long day care, outside school hours care, and other forms of formal care. Mothers who are employed but working zero hours (on leave) are counted as not employed in these analyses.

Source: 1984, 1993, 2005 and 2011 ABS Childhood Education and Care Survey/Child Care Survey, confidentialised unit record files

Figure 10: Percentage of children in any childcare, by mothers' employment status, 1984–2011

Figure 11 focuses on children of employed mothers and examines the percentage of children in care, disaggregated into formal and informal care. Participation in formal childcare varied very much by age when mothers were employed; with relatively low percentages in formal childcare when children were very young or of school age. Informal childcare was most common when children were very young, and the percentage in informal care declined with children’s age.



Note: Childcare includes formal and informal care. Formal care includes preschool, long day care, outside school hours care, and other forms of formal care. Mothers who are employed but working zero hours (on leave) are counted as not employed in these analyses. Data points have not been shown if relative standard error (RSE) > 25%.

Source: 1984, 1993, 2005 and 2011 ABS Childhood Education and Care Survey/Child Care Survey, confidentialised unit record files

Figure 11: Participation in formal, informal and parent-only care for children with employed mothers, 1984–2011

A sizeable proportion of children were in parent-only care, even when mothers were employed. For example, in each of 1984, 1993 and 2011, around one-third of children aged under one year old with an employed mother was not in any form of childcare. While children of employed mothers were less likely to be in parent-only care through the ages of early education, they were increasingly likely to be so once they were of school age. The explanation for this parent-only care is likely to be different for the youngest children as opposed to the school-aged children, with self-care and school care helping to explain this for older children. For the youngest children, when mothers were employed but the child was not in childcare, mothers tended to work fewer hours and more often work at home. (See also Gray, Baxter, & Alexander, 2008.)

More detailed analyses of these data is presented in Baxter (2013b).

Children's use of care varies also depending upon the characteristics of the jobs held by mothers. To some extent this may reflect mothers selecting jobs that allow them to have particular childcare arrangements for their child/children; or it may reflect that jobs with particular characteristics require the use of certain childcare arrangements.

AIFS research using LSAC data has examined links between parental employment and children's attendance in different forms of childcare. Baxter et al. (2007) presented analyses of childcare use by infants (aged 0–1 years) in families of employed single parents or dual employed parents ("working families"), which revealed, for example, that:

- parents working fewer than 16 hours per week were more likely to use parental care only for the study child, as were self-employed parents;
- casual employees were also more likely to use parental care only than permanent/ongoing employees; and

- parents who worked evenings/nights and who worked weekends were more likely to use parental care only than other parents. It could be that these parents worked some or all of their time in these non-standard times to facilitate the caring of children around work.

With regard to whether infants were in formal or informal care in “working families”:

- older infants were more likely to be in formal care than younger infants;
- when the primary carer was self-employed, infants were more likely to be in informal care only than in formal care only, relative to those with a primary carer who was a permanent/ongoing employee;
- this was also the case if the primary carer worked fewer than 16 hours per week, relative to working 35 hours or more; and
- the hours the non-primary carer worked did not significantly differentiate between those who used formal care and those who used informal care, and neither did parental income.

Hand and Baxter (2013) used LSAC data to explore childcare use by school-aged children, finding, for example, that:

- longer work hours by mothers was generally associated with a higher likelihood of using formal care and informal care;
- when mothers were in permanent employment, rather than casual employment or self-employment, children were more often in formal or informal after- or before-school-hours care;
- children of self-employed mothers were the least likely to be in some form of childcare;
- formal after-school-hours care was less likely when mothers worked regular evening or night-time hours;
- when mothers worked irregular, rather than regular, hours children were less often in formal after-school-hours care, but more likely to be in informal before- and after-school-hours care; and
- children in single-mother families were more likely than those in couple parent families to be in formal or informal before- or after-school-hours care.

Following Baxter (2013b), the remainder of this section uses the ABS Childhood Education and Care Survey to examine how maternal employment and other family characteristics are associated with different patterns of childcare for children aged 0–2 years, 3–5 years and 6–11 years.

Focusing first on the 0–2 year old children, Table 16 shows the percentage of children in any childcare, and then the types of childcare, by mothers’ work hours in 2011. Half of the 0–2 year old children were in some childcare: 21% in only formal care, 19% in only informal care and 11% in both formal and informal care.

As mothers’ work hours increased, children were more likely to be in formal care—either only formal care or formal plus informal care. The percentage of children in informal care, however, did not increase with mothers’ work hours.

The most common type of formal care used by 0–2 year old children was long day care (26% of 0–2 year olds overall, 47% of 0–2 year olds with employed mothers).

The most common type of informal care used by 0–2 year old children was care provided by grandparents (23% of 0–2 year old children overall, 39% for those with employed mothers).

Grandparent care was more likely for those with employed mothers, but did not increase with mothers' work hours.

A small percentage of children is reported to have had informal care provided by a non-resident parent. This was captured as a form of care when the respondent to the survey identified the child's time with another parent (who lives elsewhere) as childcare. There may be other children who spent time during the week with a non-resident parent who were not captured in these estimates, if parents did not think of this as a form of childcare.

Table 16: Childcare arrangements of children aged 0–2 years, by mothers' employment and hours worked in the previous week, 2011

	Children with not-employed mothers (%)	Children with employed mothers				All children 0–2 years (%)
		Mother worked 1–14 hours (%)	Mother worked 15–34 hours (%)	Mother worked 35+ hours (%)	All children with employed mothers (%)	
Any childcare	32.7	66.4	84.0	87.7	80.3	50.8
Formal care only	13.5	16.9	36.5	41.4	32.6	20.7
Informal care only	14.6	34.5	25.3	21.2	26.7	19.2
Formal and informal care	4.7	15.0	22.2	25.1	21.0	10.8
Parental care only	67.3	33.6	16.0	12.3	19.7	49.2
Formal care	18.2	31.9	58.7	66.5	53.6	31.5
Long day care	13.4	27.4	53.7	56.1	47.4	26.3
Family day care	3.6	3.0	4.7	9.7	5.5	4.3
Other formal care	1.6	2.5 ^a	1.0 ^a	0.9 ^a	1.4	1.5
Informal care	19.2	49.5	47.5	46.3	47.7	30.0
Grandparent	13.2	39.5	37.7	41.8	39.2	23.1
Non-resident parent	2.1	0.7	2.5	1.4	1.7	1.9
Other adult relative	2.9	4.6	5.9	4.8	5.3	3.9
Non-relative	1.1	5.8	6.9	4.1	5.9	3.0
Sample size	1,236	203	407	192	802	2,038

Notes: ^a Estimates with RSE > 25%. Informal care also includes sibling care (reported for 0.5% of children aged 0–2 years), which has not been shown separately because of high RSEs. These data refer to the use of childcare and mothers' employment participation the week before the survey.

Source: ABS 2011 Childhood Education and Care Survey (through Remote Access Data Laboratory [RADL])

Table 17 presents the results of logistic regression (using odds ratios [OR]), in which child age, maternal employment and other family characteristics are included in models to explore which factors are associated with a higher likelihood of 0–2 year old children participating in childcare overall, or in formal care or in informal care in the previous week. For these analyses, we only include children with employed mothers, so that we can include information about the employment characteristics of mothers.

Specifically, the variables included in these analyses are:

- mothers' work hours (1–15 hours, 16–34 hours, 35 hours or more per week);
- mother used shift work to care for children;
- mother worked at home to care for children;
- mother is self-employed or employer (rather than employee);

- single mother (rather than couple mother);
- child age in years; and
- location of residence (major cities, inner regions, other regions).

Note that the shift work and working-at-home information comes from questions asked of respondents about the working arrangements they used to care for children. It is possible that some mothers are shift workers or work at home who have not been identified as such in these analyses, if they do not use these working arrangements to care for children.

The findings for 0–2 year old children with employed mothers are:

- children with mothers who worked 15–34 hours or 35 hours or more per week were more likely to be in some childcare compared to those whose mothers worked 1–15 hours per week;
- as mothers' work hours increased children were more likely to be in formal care;
- children were somewhat less likely to be in formal childcare when mothers used shift work or worked at home to care for children. These differences were not apparent for informal childcare, but were especially reflected in the likelihood of children being in any childcare for mothers who worked at home to care for children;
- children of self-employed mothers were less likely to be in childcare, with a statistically significant finding only for informal care;
- children of single mothers were more likely to be in childcare, specifically informal childcare, when compared to children in couple families;
- statistically significant differences were not apparent according to location of residence; and
- the likelihood of being in formal care (and in any care) increased significantly with age, comparing children aged under 1 year to those aged 1 and 2 years.

Note that additional analyses of types of childcare reveal that the finding for single mothers reflects children of single mothers being more often under the informal care of a non-resident parent or of a sibling, but not a grandparent.

Table 17: Likelihood of children aged 0–2 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers

	Any childcare (OR)	Formal childcare (OR)	Informal childcare (OR)
Mothers' weekly work hours (ref. = 1–14 hours)			
15–34 hours per week	2.3 ***	3.1 ***	0.8
35 hours or more per week	2.3 **	3.9 ***	0.7
Mother used shift work to care for children	0.6	0.5 *	1.2
Mother worked at home to care for children	0.5 **	0.6 *	1.2
Mother self-employed	0.4 ***	0.6	0.5 *
Single parent (ref. = couple parents)	10.5*	1.6	2.1 *
Location of residence (ref. = major cities)			
Inner regions	0.8	1.1	1.1
Other regions	0.7	0.9	0.9
Child age (ref. = < 1 years)			
1 years	1.7 *	2.2 ***	1.0
2 years	3.0 ***	5.6 ***	0.8
Constant	2.1 **	0.2 ***	1.3
N	802	802	802
Pseudo R-square	0.125	0.131	0.016

Note: Results are from logistic regressions (odds ratios). Only includes families in which there was an employed resident mother. * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

For 3–5 year old children, the analyses are a little more complex, to take account of the different ECE arrangements for these children, including long day care and preschool/kindergarten. Some 5-year-olds would have been in school, and so the 5-year olds were classified according to whether or not they were already in school in the multivariate analyses (Tables 19 and 20).

When presenting information about formal care in these analyses, formal care includes long day care and preschool (and other types of formal care).

Of all 3–5 year old children, 71% were in some childcare, including 60% in some formal care and 30% in some informal care (with 20% in both formal and informal care).

Table 18: Childcare/ECE arrangements of children aged 3–5 years, by mothers' employment and hours worked in the previous week, 2011

	Children with not-employed mothers (%)	Children with employed mothers				All children 3–5 years (%)
		Mother worked 1–14 hours (%)	Mother worked 15–34 hours (%)	Mother worked 35+ hours (%)	All children with employed mothers (%)	
Any childcare	59.8	78.1	81.4	85.8	81.8	70.7
Formal care only	39.9	40.4	40.7	42.6	41.1	40.7
Informal care only	9.6	10.1	12.2	10.5	11.2	10.3
Formal and informal care	10.3	27.6	28.6	32.8	29.5	19.7
Parental care only	40.2	21.9	18.6	14.2	18.2	29.3
Formal care	50.1	68.0	69.2	75.4	70.7	60.4
Preschool	29.9	42.6	29.5	24.9	31.4	30.5
Long day care	19.4	28.9	36.7	42.0	36.3	27.9
Family day care	2.4	2.9	4.9	5.4	4.6	3.4
Other formal care	3.0	4.5	8.5	13.7	9.0	6.0
Informal care	19.9	37.7	40.8	43.2	40.7	30.0
Grandparent	10.8	25.2	29.5	24.0	26.9	18.7
Non-resident parent	4.7	5.7	2.5	7.4	4.7	4.6
Other adult relative	2.8	1.6	4.1	5.7	3.9	3.3
Non-relative	2.3	4.9	6.9	10.8	7.5	4.8
In preschool						
Only preschool	21.4	18.7	11.4	7.6	12.1	16.8
Preschool and some other childcare	8.5	23.9	18.2	17.2	19.3	13.8
Sample size	993	254	526	304	1,084	2,077

Notes: Informal care also includes sibling care, which has not been shown separately because of high RSEs (0.9% of 3–5 year olds in sibling care).

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

The two most common types of formal care for 3–5 year olds were preschool and long day care. Among children with not-employed mothers, preschool was more common, while among children with employed mothers, long day care was more common. Preschool was most likely for children whose mothers worked 1–14 hours per week, while participation in long day care increased with mothers' work hours.

Grandparent care was the most common of the informal care types. As with younger children, 3–5 year olds were more likely to be cared for by grandparents when mothers were employed, but the percentage in grandparent care did not increase with mothers' work hours.

The results of the multivariate analyses of participation in ECEC (any childcare, formal childcare, informal childcare) for 3–5 year old children with employed mothers are given in Table 19.

The main findings for the multivariate analyses of participation in ECEC for 3–5 year old children with employed mothers are:

- as mothers' work hours increased, children were more likely to be in some childcare or ECEC, specifically in formal care (long day care or preschool);

- children of self-employed mothers were less likely to be in childcare, with a statistically significant finding only for formal care;
- children of single mothers were more likely to be in childcare, specifically informal childcare, when compared to children in couple families;
- children living outside major cities and inner regional areas were less likely than those in major cities to be in informal childcare;
- children aged 4 years were significantly more likely than 3-year-old children to be in formal childcare; and
- children aged 5 years and at school were significantly less likely than 3-year-olds to be in childcare (formal or informal care).

Table 19: Likelihood of children aged 3–5 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers

	Any childcare (OR)	Formal childcare (OR)	Informal childcare (OR)
Mothers' weekly work hours (ref. = 1–14 hours)			
15–34 hours per week	1.3	1.5	1.1
35 hours or more per week	2.4 **	2.6 ***	1.2
Mother used shift work to care for children			
Mother worked at home to care for children	0.5	0.7	1.3
Mother self-employed	1.3	1.6	1.0
Mother self-employed	0.4 *	0.5 *	0.8
Single parent (ref. = couple parents)			
Single parent (ref. = couple parents)	1.9 *	1.1	3.0 ***
Location of residence (ref. =major cities)			
Inner regions	1.1	0.9	1.0
Other regions	0.8	1.0	0.6*
Child age (ref. = 3 years)			
4 years	1.6	2.3 ***	1.1
5 years and not at school	0.7	1.6	1.0
5 years and at school	0.1 ***	0.1 ***	0.6 ***
Constant	12.0 ***	3.5 ***	0.7 *
N	1,084	1,084	1,084
Pseudo R-square	0.280	0.294	0.041

Note: Results are from logistic regressions (odds ratios). Only includes families in which there was an employed resident mother. * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Another set of models was estimated for these children, to allow analyses of which children attended long day care and which children attended preschool, and also, which children attended only preschool or preschool plus some other form of care (Table 20). These models found that:

- participation in long day care increased with mothers' work hours;
- participation in preschool was less likely when mothers worked 15–34 hours or 35 hours or more, rather than fewer hours. This especially accounts for children's attendance in only preschool;
- children were a little more likely to attend preschool (but not long day care) when mothers used shift work to care for children;

- children were a little more likely to be in only preschool when mothers worked at home to care for children;
- children were a little less likely to attend long day care when mothers were self-employed;
- children of single mothers, rather than couple parents, were somewhat less likely to be in only preschool;
- regional differences were not apparent in these data;
- children aged 4 years, or aged 5 years but not yet in school, were the most likely to be in preschool—either preschool alone or preschool combined with long day care; and
- compared to children aged 3 years old, children aged 4 or 5 years were less likely to be in long day care.

Table 20: Likelihood of children aged 3–5 years being in long day care and/or preschool in the previous week, by selected family characteristics, children with employed mothers

	Formal childcare	Long day care	Preschool		
			Preschool only or with other care	Preschool only	Preschool with other care
Mothers' weekly work hours (ref. = 1–14 hours)					
15–34 hours per week	1.5	1.9 ***	0.5 **	0.6 *	0.8
35 hours or more per week	2.6 ***	2.8 ***	0.4 ***	0.4 ***	0.7
Mother used shift work to care for children	0.7	0.6	2.0 *	1.5	1.7
Mother worked at home to care for children	1.6	1.0	1.1	1.7 *	0.8
Mother self-employed	0.5 *	0.6 *	0.9	1.4	0.6
Single parent (ref. = couple parents)	1.1	1.2	0.7	0.4 *	1.0
Location of residence (ref. = major cities)					
Inner regions	0.9	0.8	0.9	1.2	0.7
Other regions	1.0	0.9	1.3	1.7	0.9
Child age (ref. = 3 years)					
4 years	2.3 ***	0.5 ***	7.0 ***	3.2 ***	5.2 ***
5 years and not at school	1.6	0.3 ***	7.2 ***	4.5 ***	4.0 ***
5 years and at school	0.1 ***	0.0 ***	0.2 ***	0.3 **	0.1 ***
Constant	3.6 ***	1.0	0.4 ***	0.1 ***	0.2 ***
N	1,084	1,084	1,084	1,084	1,084
Pseudo R-square	0.294	0.269	0.273	0.142	0.204

Note: Results are from logistic regressions (odds ratios). Only includes families in which there was an employed resident mother. * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

See also Baxter and Hand (2013) and Hand et al. (in press) for research focused on ECEC in the year before full-time school. Baxter and Hand (2013) used a range of data sources to explore the different ECEC arrangements for children in the year before full-time school. Some findings from these analyses were:

- Children most likely to be missing out on ECEC (preschool or long day care) in the year before school were Indigenous children and children from non-English speaking backgrounds.

- Children from socio-economically disadvantaged families were less likely to participate in ECE than those from socio-economically advantaged families.
- Children living in remote areas had the lowest levels of participation in ECEC, compared to those living in major city areas, and some variation was also apparent according to the disadvantage of regions. The findings with regard to geographic location were not apparent when the socio-economic status of families was also taken into account.
- Variation in types of ECEC used in the year before school was apparent across jurisdictions, given that some states have an emphasis on ECEC delivered through the education system, with preschool/kindergarten often attached to schools (the “government” model, predominant in South Australia, Western Australia, Tasmania, the Northern Territory and the ACT); and other states have a greater emphasis on ECEC delivered through non-government providers (the “non-government” model, predominant in NSW, Victoria and Queensland).
- This meant also that links between maternal employment and ECEC were different in the “government” versus “non-government” states/territories. For example, under the “government” model in families with full-time-employed mothers, children were often only in preschool or in a combination of preschool and long day care. Under the non-government model, in families with full-time-employed mothers, the most common arrangement was for children to be only in long day care.

Of particular relevance, discussed in these reports, was the difficulty that could arise for mothers negotiating the more structured hours of preschool (or kindergarten) around their paid work. Decision-making about the choice of preschool or childcare was a focus of both reports.

The overall figures for childcare participation by 6–11 year old children are given in Table 21. Two-thirds of these children were in parent-only care. Even when mothers were employed, 56% of children were in parent-only care; and when mothers were in full-time employment, 50% were in parent-only care.

Children were more likely to be in informal care (24%) than in formal care (14%). The most common providers of informal care were grandparents (12% of children) and non-resident parents (6%). The only type of formal care reported on here was outside-school-hours care (13% of children), with very small numbers in other types of formal care.

Table 21: Childcare arrangements of children aged 6–11 years, by mothers' employment and hours of work in the previous week, 2011

	Children with not-employed mothers	Children with employed mothers				All children 6–11 years
		Mother worked 1–14 hours	Mother worked 15–34 hours	Mother worked 35+ hours	All children with employed mothers	
Any childcare	18.6	28.6	42.7	50.3	42.5	33.6
Formal care only	3.4	4.0	13.0	17.7	12.9	9.3
Informal care only	13.9	22.2	22.8	24.5	23.2	19.9
Formal and informal care	1.2	2.4	6.9	8.1	6.4	4.4
Parental care only	81.4	71.4	57.3	49.7	57.5	66.4
Formal care	4.6	6.4	19.9	25.8	19.3	13.7
Outside-school-hours care	4.3	6.1	18.7	24.3	18.1	12.9
Informal care	15.2	24.6	29.7	32.5	29.6	24.3
Grandparent	5.3	12.4	16.5	18.8	16.4	12.4
Non-resident parent	6.2	2.8	5.2	6.5	5.1	5.5
Other adult relative	1.9	1.6	3.0	2.5	2.6	2.3
Sibling	1.1	3.7	1.9	3.4	2.7	2.1
Non-relative	1.5	4.8	6.8	5.2	5.9	4.3
Sample size	1,391	432	1,235	816	2,483	3,874

Notes: Family day care and other formal care not shown within formal care due to high RSE (0.4% of 6–11 year old children in family day care and 0.5% in other formal care).

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Participation in childcare increased with mothers' work hours, and this was true of both formal and informal care. This was also apparent in the multivariate analyses (Table 22). Other results from these analyses are:

- use of shift work or working at home to care for children were unrelated to participation in childcare for 6–11 year olds;
- children with self-employed mothers were significantly less likely to be in formal or informal childcare;
- children of single mothers were significantly more likely to be in formal care or informal care, compared to children of couple parents;
- children in major city areas were significantly more likely to be in childcare (formal or informal) than children in other regions of Australia. The difference was not statistically significant for informal care, comparing major city and inner regional areas; and
- older children were significantly less likely to be in childcare, and this was especially apparent for participation in formal childcare.

As for the younger children, the finding that children of single mothers were more likely to be in informal care than children of couple parents reflects that children in single-mother families were more likely to be cared for by a non-resident parent or by another relative. It does not reflect a greater likelihood of them being cared for by a grandparent.

Table 22: Likelihood of children aged 6–11 years being in formal and informal childcare in the previous week, by selected family characteristics, children with employed mothers

	Any childcare (OR)	Formal childcare (OR)	Informal childcare (OR)
Mothers' weekly work hours (ref. = 1–14 hours)			
15–34 hours per week	1.8 ***	3.3 ***	1.2
35 hours or more per week	2.6 ***	5.0 ***	1.4 *
Mother used shift work to care for children	0.9	0.8	1.3
Mother worked at home to care for children	1.0	1.0	1.2
Mother self-employed	0.5 ***	0.3 ***	0.6 **
Single parent (ref. = couple parents)	2.8 ***	2.0 ***	2.8 ***
Location of residence (ref. = major cities)			
Inner regions	0.6 ***	0.5 ***	0.9
Other regions	0.5 ***	0.4 ***	0.7 **
Child age (ref. = 6 years)			
7 years	0.9	0.9	1.0
8 years	0.8	0.8	1.0
9 years	0.6 ***	0.5 ***	0.8
10 years	0.5 ***	0.4 ***	0.7 *
11 years	0.3 ***	0.2 ***	0.6 ***
Constant	0.8 *	0.2 ***	0.4 ***
N	2,853	2,853	2,853
Pseudo R-square	0.086	0.115	0.041

Note: Results are from logistic regressions (odds ratios). Only includes families in which there was an employed resident mother. * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Before concluding this section, it is worth noting that throughout these analyses, the models predicted a greater amount of variation in the use of formal care by children than in the use of informal care, as indicated by the pseudo *R*-square values. The relatively low values for the models predicting informal care use suggest that factors other than those included in the models make more of a difference in predicting a child's use of informal care than for formal care. Clearly, for informal care one important factor would be the availability of someone to provide this informal care, whether that be a grandparent, another family member, or someone else who lives nearby and has the capacity and willingness to help with childcare.

With formal care also, while some associations were found in these analyses, again, much of the variation remains unexplained. As with informal care, to some extent there could be additional variation that relates to the availability and characteristics of formal care in the local area.

Additional parental, family, child and local area characteristics not included in these analyses are likely to explain some of the variation, with parent and child attitudes about childcare no doubt being part of this.

8 Unmet demand for childcare

An important question is the extent to which families are able to find solutions to their childcare needs. This is clearly one of the key issues that underlies this Inquiry.

The ABS Childhood Education and Care Survey includes information on whether families require any or additional early childhood education or care for their children. (See ABS, 2012, for further data on this topic.)

It is estimated from this ABS survey that in 2011 additional care or preschool was needed by 196,500 children (6%) aged up to 11 years. The age group within which there was the lowest unmet demand for childcare was 6–11 year olds, with 3% of these children reported to need some or more formal childcare. Among the 3–5 year olds, 10% were reported to need some or more formal care/ECEC. Most of this related to an unmet demand for preschool (7% of children in this age group) although there was an unmet demand for formal childcare for 4% of children aged 3–5 years. For under 3-year-olds, 7% were reported as having an unmet demand for ECEC.

Table 23: Whether some or additional formal ECEC (care or preschool) currently required, by age of child, 2011

	Estimated no. of children	% within age group
Age 0–2 years		
Requires some/more ECEC	59,700	6.8
Does not require some/more ECEC	814,600	93.2
Total	874,300	100.0
Age 3–5 years		
Requires some/more ECEC	87,900	10.2
Requires some/more formal childcare	37,000	4.3
Requires some/more preschool	63,100	7.3
Does not require some/more ECEC	772,200	89.8
Total	860,000	100.0
Age 6–11 years		
Requires some/more ECEC	48,900	3.0
Does not require some/more ECEC	1,581,100	97.0
Total	1,630,000	100.0
All children aged up to 11 years		
Requires some/more ECEC	196,500	5.8
Does not require some/more ECEC	3,167,900	94.2
Total	3,364,400	100.0

Notes: The estimates refer to child-level data.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Table 24 provides some more information about the main reasons why the children had an unmet demand for care or preschool and the care arrangements that parents had made. For 6–11 year olds, the main reason they were reported to need additional care was for their parents' work or study (70% of the children with unmet childcare needs). The percentage citing work or study reasons was lower for children aged 0–2 years (56%), with "beneficial for child" being the main reason given by 24% of those with unmet childcare needs. For 3–5 year olds,

“beneficial for child” was the predominant reason (60% of children with unmet childcare/preschool needs), against 32% being due to parents’ work or study.

When parents of children with unmet childcare/preschool needs were asked whether they had to make alternative care arrangements for their child, there was considerable diversity in the responses. The parents of children aged 0–2 years were most likely to say they had not had to make alternative care arrangements, while the parents of 3–5 year olds were the most likely to say that they had to make alternative care arrangements—most often this arrangement was care with a resident parent.

Parents of children with unmet care/preschool needs were also asked if they had had to make alternative work arrangements to care for their child. Most of the parents of 3–5 year olds had not made alternative work arrangements (73%). Parents of 6–11 year olds (48%) and of 0–2 year olds (38%) were somewhat more likely to say they had made alternative work arrangements, with use of flexible work hours being most common for parents of the older children, and changing work hours being most common for parents of the younger children.

Table 24: Main reasons and care arrangements for children who currently require some or additional formal ECEC (care or preschool), by age of child, 2011

	Age 0–2 years	Age 3–5 years	Age 6–11 years	Age 0–2 years	Age 3–5 years	Age 6–11 years
	Estimated no. of children ('000)			% of children		
Total requiring some/more ECEC	59.7	87.9	48.9	100.0	100.0	100.0
Main reason additional care required						
Work/study	33.4	27.6	34.0	55.9	31.5	69.6
Personal	11.9	3.5 ^b	7.1 ^b	19.9	3.9 ^b	14.4 ^b
Beneficial for child	14.2	52.6	6.1 ^b	23.7	59.8	12.4 ^b
Other	0.3 ^b	4.2 ^b	1.8 ^b	0.4 ^b	4.8 ^b	3.6 ^b
Alternate care arrangements made						
No	38.5	31.6	26.0	64.5	36.0	53.2
Yes	21.2	56.3	22.9	35.4	64.1	46.8
Types of arrangement made ^a						
Care with resident parent	7.7 ^b	29.2	8.7 ^b	13.0 ^b	33.2	17.8
Grandparent care	10.2	10.4	5.9 ^b	17.1	11.8	12.0 ^b
Other person	6.3 ^b	6.5 ^b	14.5	10.6 ^b	7.3 ^b	3.0
Formal care	1.8 ^b	10.5	0.1 ^b	3.0 ^b	12.0	0.0 ^b
Other	1.2 ^b	7.4 ^b	1.2 ^b	2.1 ^b	8.4 ^b	2.4 ^b
Alternative work arrangements made by either parent						
No	36.8	64.5	25.7	61.7	73.3	52.5
Yes	22.9	23.4	23.2	38.3	26.7	47.5
Types of work arrangements made ^a						
Changed work hours	11.1 ^b	14.1	10.1	18.6	16.0	20.7
Used flexible work hours	9.1	7.2 ^b	12.9	15.3	8.3 ^b	26.5
Other	9.4	7.8	6.5	15.8	8.9	13.3

Notes: ^a More than one response was permitted. ^b Estimates with RSE > 25%. The estimates refer to child-level data.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Table 25 shows the types of care that parents were seeking for children with an unmet childcare need. For 0–2 year old children, long day care was the most commonly reported type of care

sought (81%) with 15% seeking family day care. For 3–5 year olds, long day care was again the most commonly sought type of care (61%), then occasional care (16%) and before/after school hours care (16%). For older school-age children, before/after school care was the main care type sought (82%).

When asked whether the additional care was sought on a regular or occasional basis, parents most often reported that regular care was needed, although for 6–11 year olds, 40% of parents reported that occasional care was needed.

Table 25: Types of care sought for children who currently require some or additional formal care, by age of child, 2011

	Age 0–2 years	Age 3–5 years	Age 6–11 years	Age 0–2 years	Age 3–5 years	Age 6–11 years
	Estimated no. of children ('000)			% of children		
Total requiring some/more childcare	56.9	37.0	48.9	100.0	100.0	100.0
Type of care required						
Long day care	45.8	22.4	2.8 ^a	80.6	60.5	5.8 ^a
Before/after school hours	n.a.	5.8 ^a	40.2	n.a.	15.5 ^a	82.3
Family day care	8.8 ^a	2.8 ^a	1.7 ^a	15.4 ^a	7.6 ^a	3.4 ^a
Occasional care	2.3 ^a	6.0 ^a	4.2 ^a	3.9 ^a	16.3 ^a	8.7 ^a
Regular or occasional care required						
Regular	47.5	27.3	29.4	83.5	73.9	60.2
Occasional	9.4 ^a	9.6	19.5	16.6 ^a	26.1	39.9

Notes: ^a Estimates with RSE > 25%. The estimates refer to child-level data.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

The association between unmet childcare/preschool needs for children, and mothers' employment is shown in Table 26. There is actually very little evidence of a relationship between mothers' employment and unmet childcare/preschool needs. This may reflect, in the context of work-related childcare, parents having adjusted their care or work arrangements to address any unmet demand for care that they have.

Table 26: Whether some or additional formal ECEC (care or preschool) required, by age of child and mothers' employment in previous week, 2011

	Children with not-employed mothers (%)	Children with employed mothers				All children (%)
		Mothers worked 1–14 hours (%)	Mothers worked 15–34 hours (%)	Mothers worked 35+ hours (%)	All children with employed mothers (%)	
Age 0–2 years						
Requires some/more ECEC	5.4	7.9 ^a	8.8	11.7	9.3	6.8
Age 3–5 years						
Requires some/more ECEC	11.8	7.6 ^a	9.5	7.7	8.5	10.2
Requires some/more childcare	4.7	1.9 ^a	4.4	4.3 ^a	3.8	4.3
Requires some/more preschool	8.8	5.7 ^a	5.8	6.1	5.9	7.3
Age 6–11 years						
Requires some/more ECEC	2.6	1.9 ^a	3.3	4.0	3.3	3.0

Notes: ^a Estimates with RSE > 25%. The estimates refer to child-level data.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

Multivariate analyses were used to look for factors that explained a higher likelihood of children having some unmet childcare or preschool need. We used a simpler model than in previous analyses, and included children of employed as well as not-employed mothers (Table 27). There were only a small number of statistically significant findings:

- for 0–2 years olds, children already using some formal care were more likely than others to have an unmet need for more formal care;
- for 3–5 year olds, there was a greater likelihood of having an unmet need for childcare in outer regional areas of Australia compared to children in major cities; and
- for 6–11 year olds, children in single-mother families were more likely to have an unmet need for formal childcare when compared to children in couple-parent families.

When models were estimated for children of employed mothers only, and job characteristics added, then none of the job characteristics were statistically significant. In fact, in these models the only variables that were significant were the single-parent indicator for children aged 0–2 years and 6–11 years; and the child-age/at-school indicator variables for children aged 3–5 years.

Table 27: Likelihood of children aged up to 11 years having unmet demand for childcare, by selected family characteristics, by age of child

	0–2 years (OR)	3–5 years			6–11 years (OR)
		Formal childcare (OR)	Preschool (OR)	Formal childcare or preschool (OR)	
Formal care currently used	2.4 ***	1.2	0.9	1.0	1.6
Informal care currently used	0.8	0.9	1.2	1.1	1.1
Mother not employed	0.7	1.0	1.4	1.3	0.8
Single parent (ref. = couple parents)	1.6	1.2	0.9	1.0	1.6 *
Location of residence (ref. = major cities)					
Inner regions	0.7	1.1	1.0	1.1	1.0
Other regions	1.3	2.2 **	1.4	1.9 **	0.7
Constant	0.0 ***	0.1 ***	0.1 ***	0.1 ***	0.0 ***
N	2,038	2,077	2,077	2,077	3,874
Pseudo R-square	0.049	0.037	0.071	0.050	0.015

Note: Results are from logistic regressions on child-level data. Models also include dummy variables for age of child; none of these were statistically significant except in the unmet demand for childcare for 3–5 year olds. Unmet demand was less likely for children aged 4 years (odds ratio = 0.4 ***) or aged 5 years and at school (odds ratio = 0.4 **), compared to age 3 years. For both, this reflected a lesser likelihood of having an unmet demand for formal childcare, and the 5-year-olds in school also had a lesser likelihood of having an unmet demand for preschool. Only includes families in which there was an employed resident mother. * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

Source: ABS 2011 Childhood Education and Care Survey (through RADL)

9 Final remarks

This submission has provided a synthesis of recent AIFS research on maternal employment and childcare, along with some new research that it is hoped will assist the Productivity Commission in undertaking the Childcare and Early Childhood Learning Inquiry. The Inquiry of course explores important issues that we have not covered here; for example, the costs and affordability of childcare; the quality of childcare and early learning; and the links between childcare, early learning and children's outcomes. These are matters that are clearly important to the wellbeing of children and families, and no doubt are also important in decision-making about parental employment.

From the perspective of maternal employment, the childcare and early learning system is clearly important to many families, although informal care remains prominent also in how families manage their childcare needs.

As we have shown here, many women remain out of employment for a time when they are caring for children, especially young children. To what extent some of these mothers would enter employment sooner, should a different system of childcare and early learning be in place, is a difficult question to answer. Many mothers do not cite childcare problems when they are giving reasons for their non-employment. However, we know that decision-making about employment is complex, with the availability of suitable childcare being part of the story, whether that be through the formal care system or informal providers. Also, mothers' employment decisions will depend upon the availability of suitable employment and the degree to which parents can share the care of children (whether in couple or separated families). Financial considerations are likely to matter to some families, as are the specific needs of individual children. These complexities clearly need to be taken into account when thinking about associations between childcare and maternal employment.

10 References

- Australian Bureau of Statistics. (2012). *Childhood education and care, Australia, June 2011*. Canberra: ABS.
- Baxter, J. A. (2013a). *Australian mothers' participation in employment: Analyses of social, demographic and family characteristics using the Household, Income and Labour Dynamics in Australia (HILDA) survey* (AIFS Research Paper No. 52). Melbourne: Australian Institute of Family Studies.
- Baxter, J. A. (2013b). *Childcare participation and maternal employment trends in Australia* (AIFS Research Report No. 26). Melbourne: Australian Institute of Family Studies.
- Baxter, J. A. (2013c). Employment and the life course: Analyses of birth cohort differences of young Australian women. In A. Evans & J. H. Baxter (Eds.), *Negotiating the life course: Stability and change in life pathways* (pp. 99–120). Netherlands: Springer.
- Baxter, J. A. (2013d). *Employment characteristics and transitions of mothers in the Longitudinal Study of Australian Children* (Occasional Paper No. 50). Canberra: Department of Social Services.
- Baxter, J. A. (2013e). *Parents working out work* (Australian Family Trends No. 1). Melbourne: Australian Institute of Family Studies.
- Baxter, J. A. (2013f, 27 November). *Parents working out work: An examination of families interactions with paid employment in Australia today*. Paper presented at the AIFS Seminar series, Melbourne.
- Baxter, J. A. (in press). Care for children in school holidays. In Australian Institute of Family Studies, *The Longitudinal Study of Australian Children annual statistical report 2013*. Melbourne: AIFS.
- Baxter, J. A., & Gray, M. (2006). Paid work characteristics of mothers with infants. *Family Matters*, 77, 34–41.
- Baxter, J. A., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). *Mothers and fathers with young children: Paid employment, caring and wellbeing* (Social Policy Research Paper No. 30). Canberra: Department of Families, Community Services and Indigenous Affairs.
- Baxter, J. A., & Hand, K. (2013). *Access to early childhood education in Australia* (AIFS Research Report No. 24). Melbourne: Australian Institute of Family Studies.
- Baxter, J. A., & Renda, J. (2011a). Lone and couple mothers in the Australian labour market: Differences in employment transitions. *Australian Journal of Labour Economics*, 14(2), 103–122.
- Baxter, J. A., & Renda, J. (2011b). *Lone and couple mothers in the Australian labour market: Exploring differences in employment transitions* (AIFS Research Paper No. 48). Melbourne: Australian Institute of Family Studies.
- Gray, M., Baxter, J. A., & Alexander, M. (2008). Parent-only care: A childcare choice for working couple families? *Family Matters*, 79, 42–49.
- Gray, M., Qu, L., Renda, J., & de Vaus, D. (2006). Changes in the labour force status of lone and couple Australian mothers, 1983–2005. *Australian Journal of Labour Economics*, 9(4), 395–416.
- Hand, K. (2005). Mothers' views on using formal childcare. *Family Matters*, 70, 10–17.
- Hand, K. (2007). Mothers' accounts of work and family decision-making in couple families: An analysis of the family and work decisions study. *Family Matters*, 75, 70–76.
- Hand, K., Baxter, J., Sweid, R., Bluett-Boyd, N., & Price-Robertson, R. (in press). *Access to early childhood education in Australia: Insights from a qualitative study* (Research Report No. 27). Melbourne: Australian Institute of Family Studies.
- Hand, K., & Baxter, J. A. (2013). Maternal employment and the care of school-aged children. *Australian Journal of Labour Economics*, 16(3), 329–349.
- Hand, K., & Hughes, J. (2004). Mothers' reflections about work and family life. *Family Matters*, 69, 45–49.
- Hayes, A., Qu, L., Weston, R., & Baxter, J. A. (2011). *Families in Australia: Sticking together in good and tough times*. Melbourne: Australian Institute of Family Studies.
- Huerta, M., Adema, W., Baxter, J., Corak, M., Deding, M., Gray, M. C. et al. (2011). *Early maternal employment and child development in five OECD countries* (OECD Social, Employment and Migration Working Papers No. 118). Paris: OECD.
- McDonald, P. (2001). Work-family policies are the right approach to the prevention of very low fertility. *People and Place*, 9, 17–27.
- Sims, M. (2011). *Early childhood and education services for Indigenous children prior to starting school* (Closing the Gap Clearinghouse Resource Sheet No. 7). Canberra: Australian Institute of Health and Welfare.
- Thévenon, O. (2013). *Drivers of female labour force participation in the OECD* (OECD Social, Employment, Migration Working Papers No. 145). Paris: OECD.
- Wise, S. (2012). *Improving the early life outcomes of Indigenous children: Implementing early childhood development at the local level* (Closing the Gap Clearinghouse Issues paper No. 6). Canberra: Australian Institute of Health and Welfare.

Appendix: Supplementary tables

Table A1: Occupation of employed women, percentage working weekend and variable hours, 2008

Occupation	Works weekends (%)	Work hours vary (%)	Required to be on call or standby (%)	Hours vary or on call (%)	Sample size (N)
Managers	36.4	25.0	38.8	52.0	984
Chief executives, general managers and legislators ^a	21.6 ^e	28.8	43.6	54.6	59
Farmers and farm managers	71.8	37.9	53.2	77.0	94
Specialist managers	7.8	21.6	30.8	42.9	406
Hospitality, retail and service managers	58.9	24.9	42.8	55.1	425
Professionals	22.0	22.7	16.9	33.6	2,428
Business, human resource and marketing professionals	10.6	21.0	12.8	29.5	564
Design, engineering, science and transport professionals	13.5	29.0	13.7	37.0	194
Education professionals	11.5	22.0	10.6	26.9	652
Health professionals	49.6	23.6	25.2	41.6	643
Legal, social and welfare professionals	9.7	16.9	24.3	34.1	212
Other professionals ^b	20.5	28.9	18.1	38.5	163
Technicians and trades workers	49.0	23.3	21.9	36.7	478
Engineering, ICT and science technicians	16.0 ^e	10.2	19.3	24.3	100
Food trades workers	63.8	30.5	26.3	46.1	108
Other technician and trades workers ^c	55.7	25.5	21.3	37.9	270
Community and personal service workers	44.7	31.0	26.0	44.5	1,364
Health and welfare support workers	43.3	30.3	24.3	41.9	171
Carers and aides	27.6	26.9	24.5	39.6	661
Hospitality workers	73.6	42.8	24.7	54.3	286
Protective service workers	62.1	15.4 ^e	40.9	49.1	52
Sports and personal service workers	54.7	31.2	30.7	47.5	194
Clerical and administrative workers	13.2	16.5	12.6	25.1	2,561
Office managers and program administrators	12.1	16.0	14.5	26.6	357
Personal assistants and secretaries	8.0	14.2	17.1	25.1	318
General clerical workers	5.6	11.4	9.4	18.4	422
Inquiry clerks and receptionists	20.7	16.5	11.5	23.5	445
Numerical clerks	13.6	18.2	13.6	28.2	676
Clerical and office support workers	22.0	25.4	10.2 ^e	30.8	120
Other clerical and administrative workers	15.7	19.6	10.0	25.5	223
Sales workers	57.1	27.9	21.9	40.3	1,306
Sales representatives and agents	34.8	16.8	34.4	44.3	147
Sales assistants and salespersons	60.0	28.6	20.3	39.0	846
Sales support workers	59.5	30.7	20.6	42.0	313
Machinery operators and drivers	25.9	20.8	12.9	27.4	144
Labourers	39.5	30.3	24.0	42.3	887
Cleaners and laundry workers	34.1	29.5	25.3	42.8	318
Factory process workers	16.2	25.6	18.6	35.0	180

Occupation	Works weekends (%)	Work hours vary (%)	Required to be on call or standby (%)	Hours vary or on call (%)	Sample size (N)
Food preparation assistants	63.7	34.9	30.1	47.5	180
Other labourers ^d	47.7	31.8	21.6	43.7	209
All employed women	31.7	23.8	20.6	36.4	10,150

Note: ^a Includes managers, not further defined (NFD). ^b Includes professionals NFD, arts and media professionals, ICT professionals.
^c Includes technicians and trades workers NFD, automotive and engineering trades workers, construction trades workers, electro-technology and telecommunications trades workers, skilled animal and horticultural workers and other technicians and trades workers.
^d Includes labourers NFD, construction and mining labourers, farm, forestry and garden workers. ^e RSE > 25%.

Source: Forms of Employment Survey 2008, confidentialised unit record file

Table A2: Industry groups of employed women, percentage working weekend and variable hours, 2008

Industry group	Works weekends (%)	Work hours vary (%)	Required to be on call or standby (%)	Hours vary or on call (%)	Sample size (N)
Agriculture, forestry and fishing	54.9	36.3	41.0	61.1	225
Mining	24.8	15.6 ^d	12.4 ^d	25.3	64
Manufacturing	16.5	22.6	15.2	32.8	533
Electricity, gas, water and waste services	6.6 ^d	13.7 ^d	10.0 ^d	18.9 ^d	56
Construction	9.1	23.9	19.6	35.7	239
Wholesale trade	9.4	20.1	16.1	31.2	248
Retail trade	54.9	25.6	22.3	39.0	1410
Food retailing	59.3	27.4	23.6	41.0	480
Other retailing	54.7	26.1	21.6	38.5	797
Retail trade not further defined ^a	40.7	16.4 ^d	21.9	34.3	133
Accommodation and food services	68.8	37.2	30.8	53.0	821
Accommodation	71.0	41.4	37.1	59.3	133
Food and beverage services	68.3	36.4	29.6	51.8	688
Transport, postal and warehousing	33.8	25.0	25.7	40.3	282
Information, media and telecommunications	18.8	17.6	12.7	26.6	180
Financial and insurance services	8.6	9.3	11.8	18.5	394
Rental, hiring and real estate services	36.1	22.0	33.3	47.6	206
Professional, scientific and technical services	13.9	25.1	15.6	33.9	723
Administrative and support services	19.3	22.5	19.7	35.0	396
Public administration and safety	9.8	14.0	14.3	24.9	744
Public administration	5.6	12.9	12.1	22.3	607
Public order, safety and regulatory services, defence	28.5	18.8	24.0	36.5	137
Education and training	11.5	19.6	12.9	26.9	1188
Preschool and school education	8.2	16.5	13.0	24.6	762
Tertiary and adult education and training ^b	17.6	25.2	12.7	31.0	426
Health care and social assistance	35.8	24.8	23.9	39.0	1849
Hospitals	52.3	22.4	21.4	36.2	596
Medical and other health care services ^c	24.1	24.8	19.6	35.9	487
Residential care and social assistance services	30.3	26.8	28.5	43.1	766
Arts and recreation services	58.5	32.0	30.5	51.4	186
Other services	44.9	25.5	21.0	38.7	408
All employed	31.7	23.8	20.6	36.4	10,152

Note: ^a Includes motor vehicle, parts and fuel retailing. ^b Includes education and training NFD. ^c Includes health care and social assistance NFD. ^d Estimate with RSE > 25%.

Source: Forms of Employment Survey 2008, confidentialised unit record file

Table A3: Standard and non-standard work hours by occupation and industry group of women aged 25–54 years working on the weekday diary day, 2006

Occupation and Industry group	Standard hours (7 am to 7 pm) (%)	Non-standard hours			Sample size (%)
		7 pm to midnight (%)	Midnight to 7 am (%)	Either (7 pm to 7 am) (%)	
Occupation					
Managers	100.0	5.9 ^a	24.9	26.3	104
Professionals	99.2	4.0 ^a	24.3	27.4	320
Technicians and trades workers	100.0	12.0 ^a	17.6	27.4	62
Community and personal service workers	98.2	17.6	22.1	34.8	155
Clerical and administrative workers	98.7	4.6	9.3	13.7	359
Sales workers	97.5	6.8 ^a	15.7	21.1	76
Labourers and machinery operators and drivers	98.9	30.3	24.9	51.9	94
Industry group					
Retail trade	97.3	9.5 ^a	23.0	30.3	104
Accommodation and food services	100.0	8.5 ^a	33.5	40.3	48
Education and training	100.0	3.0 ^a	23.7	25.1	180
Health care and social assistance	97.4	15.4	19.9	32.5	234
Other industries	99.4	7.7	14.9	21.1	604
All occupations and industries	98.8	8.6	19.0	25.8	1,170

Note: ^a Estimate with RSE > 25%

Source: ABS Time Use Survey 2006, confidentialised unit record file